

Expanded Environmental Monitoring Event Report

Envirite RCRA Facility
Old Waterbury Road
Thomaston, Connecticut

Prepared for:

**Envirite Corporation
Chappaqua, New York**

Prepared by:
**ENVIRON International Corporation
Westford, Massachusetts**

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John
Noble

Digitally signed by John Noble
DN: cn=John Noble, o=ENVIRON
International Corp., ou,
email=jnoble@environcorp.com,
c=US
Date: 2014.04.09 07:10:00 -04'00'

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1 Introduction

On behalf of Envirite Corporation (Envirite), ENVIRON International Corporation (ENVIRON) has completed an expanded environmental monitoring event at the Envirite RCRA facility (the Site) located on Old Waterbury Road in Thomaston, CT. The scope of work associated with the expanded environmental monitoring event was detailed in the following documents:

- ENVIRON. 2013. Quality Assurance Project Plan (QAPP)/Sampling Analysis Plan (SAP), Envirite RCRA Facility, Old Waterbury Road, Thomaston, Connecticut. December 3.
- ENVIRON. 2013. Revised Scope of Work (SOW) for Supplemental Investigation Activities, Envirite RCRA Facility, Old Waterbury Road, Thomaston, CT. October 13.

Figure 1 is a Site Location Map showing the location of the facility. Figure 2 is an Environmental Monitoring Locations Site Plan showing the general layout of the Site and physical features including former developed areas, landfill areas, and the existing environmental monitoring network, including groundwater monitoring wells and surface water sampling locations.

1.1 Background

Envirite operated an industrial waste treatment and disposal facility at the Site from 1975 until 1990. Liquid wastes (primarily consisting of metal finishing and similar wastewater solutions and sludges) were treated and filtered to produce (1) wastewater for discharge and (2) residual solids. The wastewater, or filtrate, was discharged to the Town of Thomaston's Water Pollution Control Facility (WPCF) to the south and the non-hazardous residual solids were placed in an on-Site solid waste landfill.

In 1982, Envirite submitted a groundwater monitoring program to the Connecticut Department of Environmental Protection (CTDEP), now the Department of Energy and Environmental Protection (CTDEEP), designed to monitor releases from the portion of the landfill which was being managed as a RCRA-regulated hazardous waste unit. In 1983, Envirite filed a Part A Hazardous Waste Permit Application with the USEPA to operate the Old Waterbury Road facility as a RCRA Treatment, Storage and Disposal (TSD) Facility. In December 1986, Envirite submitted a revised Closure Plan and Post-Closure Plan for the RCRA-regulated landfill unit. The current Post-Closure Monitoring Plan (PCMP), dated April 27, 1987, was prepared by Fuss & O'Neill, Inc. to address the March 1987 comments from the U.S. Environmental Protection Agency (USEPA) and the CTDEP. The PCMP was subsequently implemented and has been maintained continuously thereafter.

On July 26, 2012, a Site meeting was attended by representatives of Envirite, ENVIRON, and USEPA to discuss additional investigation activities required to bring the Site to closure. The primary issue of concern discussed during that meeting relates to the presence of waste identified as "oily" sludge (Pre-Envirite Waste Material) located beneath the northern driveway area, which is only partially on Envirite's property. The majority of this waste material is located on the Town of Thomaston's property, extending beneath Old Waterbury Road toward the Naugatuck River. A second, smaller deposit of Pre-Envirite Waste Material is located beneath the northern landfill area within the saturated zone.

In addition, based on historical documentation, an acid release area was identified in the central portion of the Site to the west and southwest for the former facility building. Acid spills were reported at the Site in 1978 and 1983. Monitoring well MW-43D, located downgradient of the spill areas, historically shows the lowest pH. Recent data (from 2008 through 2012) indicate that cadmium, copper, and zinc have been detected in individual groundwater samples at concentrations exceeding applicable surface water protection criteria (SWPC); only zinc has been detected at an average Site-wide concentration exceeding its SWPC. The highest average zinc concentrations during this period have been detected in the groundwater samples collected from monitoring well MW-31S located in the area of Pre-Envirite Waste Material beneath the northern driveway area, followed by MW-43D along the southern property boundary.

USEPA indicated that the following issues need to be resolved as part of the final remedy selection for the facility:

1. Addressing groundwater issues in vicinity of the Pre-Envirite Waste Material beneath the northern driveway near MW-31S.
2. Assessing potential impacts to surface water caused by the Pre-Envirite Waste Material located beneath the northern landfill area.
3. Addressing surface water protection issues associated with elevated metals concentrations historically detected along the southern/downgradient edge of site (near MW-43D) adjacent to the Thomaston WPCF property.
4. Understanding the groundwater flow system beneath and downgradient of the Site and the associated groundwater/surface water interactions between the Site and the Naugatuck River and Branch Brook; including the potential for groundwater discharge to Branch Brook and the Naugatuck River to the south of the Site.
5. Evaluating impacts to sediment quality in the Naugatuck River, and potentially Branch Brook, at depositional areas upstream, downstream, and adjacent to the Site to evaluate whether there is the potential for ecological impacts to these surface water bodies.

To date, Envirite has complied with all USEPA requests and has diligently implemented investigation activities to address USEPA concerns. Furthermore, Envirite is committed to addressing outstanding issues to facilitate the achievement of final closure status for the facility.

1.2 Expanded Groundwater and Surface Water Monitoring Event

During the July 26, 2012 meeting, it was agreed that these issues would be evaluated through an expanded monitoring event intended to develop a “snapshot” of current environmental conditions and to further characterize temporal groundwater flow and groundwater/surface water interaction adjacent to and downgradient of the Site. This initial expanded monitoring event would be more comprehensive than the current PCMP. USEPA requested that the initial expanded monitoring event include sampling of all available on-Site wells as well as off-Site

monitoring wells that were installed on the Town of Thomaston WPCF property immediately to the south of the Site.

1.3 Groundwater and Surface Water Elevation Gauging

In conjunction with the environmental monitoring activities, groundwater and surface water elevation gauging was conducted on a quarterly basis. The data generated during the quarterly groundwater and surface water elevation gauging are being evaluated to develop a better understanding of the temporal groundwater flow system beneath and downgradient of the landfill; and the associated groundwater/surface water interactions around the Site, including the potential for groundwater discharge to Branch Brook and the Naugatuck River to the south of the Site. In addition, the groundwater surface water elevation gauging events will be used to evaluate the most likely locations for potential sediment quality impacts to the Naugatuck River and Branch Brook.

2 Expanded Environmental Monitoring Program

This section documents the results of ENVIRON's off-Site well reconnaissance activities and the final scope of the expanded environmental monitoring event including, the groundwater and surface water monitoring networks included in the expanded monitoring event, and the associated laboratory analytical programs for these media. In addition, the scope of the groundwater and surface water elevation gauging activities are described herein.

2.1 Off-Site Monitoring Well Reconnaissance Activities

Based on historical RFI plans, there were five wells installed on and adjacent to the Thomaston WPCF property located immediately to the south of the Envirite facility. These wells included MW-56S/D, MW-57, and MW-58S/D and three wells, MW-59S/D and MW-60, located in Old Waterbury Road immediately adjacent to the WPCF facility (see Figure 2). Envirite requested and was subsequently granted access to the WPCF property to locate and inspect the off-Site wells to evaluate their viability for sampling.

On October 31, 2013, ENVIRON conducted an initial visual reconnaissance of the WPCF property to search for the eight wells that were installed in conjunction with the historical Envirite RFI activities. A second well reconnaissance was conducted on November 12, 2013 to attempt to locate the former RFI wells using a magnetic locator. Despite these efforts, none of the former RFI wells installed on the WPCF property were found.

During the October 31, 2013 visual reconnaissance, ENVIRON identified four unknown groundwater monitoring wells on the WPCF property, designated UNK-1 through UNK-4. Based on their locations and total depths, they do not appear to be the wells that were installed during the previous Envirite investigation. During the subsequent December 2013 expanded monitoring event, ENVIRON located two additional unknown groundwater monitoring wells on the WPCF property adjacent to Branch Brook, designated UNK-5S and UNK-5D. Figure 2 depicts the locations of the unknown wells UNK-1 through UNK-5S/D.

UNK-1 was found to be filled with concrete or cement so water levels cannot be obtained from this well. UNK-2 (total depth = 19.5' bgs) and UNK-3 (total depth = 35.3' bgs) were installed as well couplets, the companion wells of which were observed to be destroyed. UNK-4 was apparently installed as a single well (total depth = 27.1' bgs). UNK-5S and UNK-5D were also installed as a couplet with total depths of approximately 13.8' and 41.0' bgs, respectively.

WPCF personnel were unable to provide well logs or any information documenting the geologic strata intercepted by these wells or their construction (screened intervals, divider/annular seals, etc.).

2.2 Expanded Groundwater Monitoring Program

The expanded groundwater monitoring event was conducted from December 16 to December 27, 2013 and included sampling of the following monitoring wells included in the RFI groundwater monitoring network.

Expanded Groundwater Monitoring Network

Well	Screened Interval (feet bgs)	Unit
MW-30	38 – 48	OB
MW-31S	17 – 27	OB
MW-31D	26.5 – 31.5	OB
MW-31B	37 – 47	BR
MW-32S	14 – 24	OB
MW-32D	24.5 - 39.5	OB
MW-33	15 – 25	OB
MW-36	21.5 - 31.5	OB
MW-37D	27 – 32	OB
MW-37B	55.7 - 65.7	BR
MW-41S	10 – 20	OB
MW-41D	17 – 32	OB
MW-41B	45 – 55	BR
MW-42S	22.5 – 32.5	OB
MW-42B	65 – 75	BR
MW-43S	22.5 – 32.5	OB
MW-43D	58 – 68	OB
MW-44S	17 – 27	OB
MW-44D	62 – 72	OB
MW-44B	75 – 85	BR
MW-50S	13.7 – 18.7	OB
MW-51D	18.3 - 28.3	OB
MW-51B	38.5 - 48.5	BR
MW-52D	43.5 - 58.5	OB
MW-53D	25 – 40	OB
MW-55B	15 – 25	BR
MW-56S	7 – 12	OB
MW-56D	49 – 54	OB
MW-57	7 – 12	OB
MW-58S	6 – 11	OB
MW-58D	68.5 – 75.1	OB

Well	Screened Interval (feet bgs)	Unit
MW-59S	5 – 15	OB
MW-59D	40 – 50	OB
MW-60	4 – 14	OB
MW-61S	14 – 20	OB
MW-61D	42 – 52	OB
MW-61B	59 – 69	BR
MW-62	19 – 21	OB
MW-62B	26 -36	BR
MW-63	14.5 – 24.5	OB
MW-36	Indicates well is located across Branch Brook in GA Area	
MW-60S	Indicates well is located off Site on Thomaston WPCF property and in adjacent roadway	
MW-52D	Indicates well was not found or is not viable for sampling (see below).	

Robert Brackett of the USEPA visited the Site on December 19, 2013 to observe the groundwater sampling activities and proposed surface water sampling locations.

Note that during the monitoring well inspection conducted on July 25, 2013, monitoring well MW-52D was found to be obstructed above the groundwater level and could not be cleared, so this well is unavailable for sampling. Although monitoring well MW-36 was also found to be obstructed; ENVIRON was able to obtain groundwater samples from this well using a peristaltic pump.

The unknown off-Site wells were not recommended for sampling because their intended purpose and installation details are unknown; and no boring logs are available to assess the geologic stratigraphy intercepted by the wells.

2.2.1 Groundwater Sampling Methodology

Groundwater sampling activities for this monitoring event were conducted in accordance with the current USEPA–Region 1 Low-Stress (Low-Flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (EQASOP-GW 001), Revision No. 3, dated January 19, 2010. Detailed groundwater sampling procedures are discussed in the QAPP/SAP.

With the exception of well MW-36, groundwater samples were collected using QED bladder pumps equipped with disposable bladders and HDPE sample tubing. Bladders and tubing were replaced between wells and pumps were decontaminated in accordance with the procedures specified in the QAPP/SAP. Because MW-36 was obstructed, the sample from this well was collected using a peristaltic pump and small HDPE diameter tubing, rather than a bladder pump.

Upon stabilization of field parameters within acceptable tolerances, groundwater samples were collected directly in laboratory-supplied containers containing the appropriate sample preservative for each analytical method and were maintained on ice until delivery to the analytical laboratory.

During low flow sampling, if turbidity could not be stabilized below 5 Nephelometric Turbidity Units (NTUs), such as at MW-61S, samples were collected for both total and dissolved metals concentrations to evaluate the potential effect of turbidity on these concentrations. The sample aliquots for dissolved metals analysis were field filtered through a 0.45 micron groundwater filter prior to preservation in the field.

Groundwater sampling activities at each monitoring well are documented on Low-Flow Groundwater Sampling Field Forms and Field Equipment Calibration logs contained in Appendix A.

2.2.2 Groundwater Laboratory Analytical Program

Groundwater samples collected during the expanded monitoring event were submitted to Spectrum Analytical, Inc. (Spectrum) of Agawam, Massachusetts for the following laboratory analyses:

- **Volatile Organic Compounds (VOCs):** (EPA Method 8260B);
- **Total Metals:** Arsenic, Barium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Sodium, Nickel, and Zinc (EPA Method 6010/200.7);
- **Indicator Parameters:** Chloride (EPA Method 300.0), Conductivity (SM2510B), Ammonia as Nitrogen (EPA Method 350.1), Nitrite as Nitrogen (EPA Method 300.0), Nitrate as Nitrogen (EPA Method 300.0/9056), Phenolics (E420.4), Sulfate (EPA Method 300.0), Total Cyanide (EPA Method 335.4/9010), Total Dissolved Solids (SM2540C), Total Organic Carbon (SM 5310B), Total Suspended Solids (SM2540D), Total Organic Halogens (SW9020).

Appendix B contains the Spectrum laboratory reports.

2.3 Surface Water Sampling Program

The expanded surface water monitoring event was conducted on December 27, 2013 due to a rain event that occurred on the final day of the groundwater monitoring event on December 23, 2013. Two surface water samples were collected from the Naugatuck River (SW-NR-1 and SW-NR-2) and two were collected from Branch Brook (SW-BB-1 and SW-BB-2), upstream and downstream of the facility, respectively. Figure 2 depicts the surface water sample locations.

The downstream surface water sample from the Naugatuck River was collected upstream of the main WPCF discharge outfall, the location of which is also depicted on Figure 2. The downstream sample from Branch Brook was collected from approximately 430 feet south of Envirite's southern property line at the location approved by USEPA.

2.3.1 Surface Water Sampling Methodology

Surface water samples were collected from within 2-3 feet of the shorelines adjacent to the landfill using disposable bottom-filling HDPE bailers inserted through the water column to just above the sediment water interface. The water samples were immediately transferred to laboratory-supplied containers containing the appropriate sample preservative for each analytical method and were maintained on ice until delivery to the analytical laboratory.

For the metals analyses, surface water samples were field filtered through 0.45 micron filters prior to preservation with nitric acid in the field so the resulting metals analyses reflect dissolved metals concentrations. This was done to facilitate comparison to Connecticut Surface Water Quality Standards.

2.3.2 Surface Water Laboratory Analytical Program

The surface water samples were submitted to Spectrum for laboratory analyses by for the following parameters:

- **Volatile Organic Compounds (VOCs)** (EPA Method 8260B);
- **Dissolved Metals:** Arsenic, Barium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Sodium, Nickel, and Zinc (EPA Method 6010/200.7).

2.4 Sample Design Logistics

The following summarizes the sample design logistics for the expanded environmental monitoring event.

Sampling Matrix	Parameter	Analytical Method Reference	Number of Samples	Sampling Frequency	Sampling Period
Groundwater	VOCs	SW-846/ EPA Method 8260B	31 Primary Samples 2 Trip Blank 2 Field Duplicates 2 Equipment Blank	Once	December 16 – 23, 2013
	Total Metals	SW-846/ EPA Method 6010/200.7	31 Primary Samples 2 Field Duplicates 2 Equipment Blank		
	Indicator Parameters	Various (see above)	31 Primary Samples 2 Field Duplicates 2 Equipment Blank		
Surface Water – Naugatuck River and Branch Brook	VOCs	SW-846/ EPA Method 8260B	4 Primary Samples 1 Field Duplicate 1 Equipment Blank	Once	December 27, 2013
	Total Metals	SW-846/ EPA Method 6010/200.7			

2.5 Groundwater and Surface Water Gauging Events

Two groundwater and surface water gauging events were conducted during this monitoring period on the following dates:

- July 25, 2013
- October 31, 2013

Prior to gauging, all on-Site and off-Site wells were surveyed for position and elevation by Connecticut licensed land surveyors, Denno Land Surveying (Denno), of Tariffville, Connecticut to ensure that future groundwater gauging events yield accurate elevation data.

Depth to groundwater in each viable groundwater monitoring well was measured to the nearest 0.01 foot using an electronic interface probe. In addition, in conjunction with each groundwater gauging event, Denno measured surface water elevations at designated locations in Branch Brook and the Naugatuck River, on the same days as the groundwater gauging was completed.

The following items are noteworthy with respect to the groundwater and surface water gauging conducted during this monitoring period:

- The initial groundwater and surface water gauging event and monitoring well inspection conducted on July 25, 2013 included the on-Site groundwater monitoring wells only, as permission to access the off-Site wells on the Thomaston WPCF property had not yet been granted.
- At the request of USEPA, the scope of the surface water gauging was increased after the July 25, 2013 gauging event. The October 31, 2013 gauging event included six locations in Branch Brook and eight locations in the Naugatuck River from upstream to downstream of the Envirite Site (see Figure 3-1).
- Although their exact construction details are unknown, water levels from shallow wells UNK-2 and UNK-4 were used to generate the overburden groundwater elevation contours for October 31, 2103 because the water levels were measured to be within 10 feet of the bottom of the wells, within the presumed 10 foot screened interval. Future water levels from UNK-5S will also be used to generate the overburden groundwater elevation contours.

Appendix C contains the groundwater gauging data for each monitoring event. Table 1 summarizes the depth to groundwater and elevation data for these gauging events. In addition, Table 1 summarizes the calculated vertical hydraulic gradients at all well couplet and triplet locations.

3 Discussion of Results

As noted in the QAPP/SAP, following the completion of each semi-annual groundwater and surface water monitoring event and the initial one-time supplemental monitoring event, abbreviated semi-annual data reports will be prepared and submitted to USEPA for review and approval.

The semi-annual reports will document the performance of each monitoring event (dates, samples collected, etc.) and the associated observations and analytical results including tabulated field and analytical data, a discussion of QA/QC sample results, as well as overburden and bedrock groundwater contour maps depicting the inferred groundwater flow directions beneath the landfill.

3.1 Groundwater Elevation Plans and Inferred Groundwater Flow Directions

Overburden and bedrock groundwater elevation contours were developed for each gauging event using Surfer© surface mapping system software employing the kriging algorithm. The overburden groundwater contour maps also incorporate surface water elevations measured along the Naugatuck River and Branch Brook during the gauging events to evaluate groundwater-surface water interactions adjacent to the Site.

As requested by USEPA, groundwater elevation data from bedrock monitoring well MW-55B and deep overburden well MW-51D were used to generate the overburden groundwater elevation contours.

3.1.1 July 25, 2013 Groundwater Elevations

The first round of survey and gauging of the on-Site wells and surface water elevations in the Naugatuck River and Branch Brook was completed on July 25, 2013 and the resulting overburden and bedrock groundwater elevation contours are depicted on Figure 3-1 and 3-2, respectively.

Based on the July 25, 2013 contours, shallow overburden groundwater flows in a general south-southwesterly direction beneath the landfill under a horizontal hydraulic gradient of approximately 0.0045 feet of head per foot of horizontal distance (ft/ft). Overall the overburden groundwater elevation contours suggest that shallow overburden groundwater beneath the landfill may be discharging to Branch Brook at a point south of the landfill adjacent to the WPCF property, in the general vicinity of downstream surface water sample SW-BB-2.

The July 25, 2013 shallow overburden groundwater elevation contours in conjunction with the surface water elevations measured on that date suggest that the Naugatuck River adjacent to the landfill may be a losing reach (recharging groundwater) while shallow overburden groundwater along Branch Brook appears to flow parallel with the Brook until a point south of the landfill where overburden groundwater may be discharging to Branch Brook.

Bedrock groundwater flows in a general south-southwest to southeast direction beneath the landfill under a horizontal hydraulic gradient of approximately 0.0031 to 0.0044 ft/ft. The

bedrock groundwater elevation contours for this date suggest bedrock groundwater flow away from an axis centered on wells MW-55B, MW-51B, and MW-61B.

3.1.2 October 31, 2013 Groundwater Elevations

The second round of survey and gauging of the on-Site and off-Site wells, including the expanded set of surface water elevations in the Naugatuck River and Branch Brook, was completed on October 31, 2013 and the resulting overburden and bedrock groundwater elevation contours are depicted on Figure 4-1 and 4-2, respectively.

Based on the October 31, 2013 contours, shallow overburden groundwater flows in a general southwesterly to south-southeasterly direction beneath the landfill under a horizontal hydraulic gradient of approximately 0.0034 ft/ft. These contours suggest overburden groundwater may be discharging to Branch Brook at a point south of the landfill adjacent to the WPCF property, in the general vicinity of downstream surface water sample SW-BB-2.

The October 31, 2013 shallow overburden groundwater elevation contours in conjunction with the surface water elevations measured on that date suggest that both Branch Brook and the Naugatuck River adjacent to the landfill were losing reaches, recharging the groundwater beneath the landfill. The location of shallow overburden discharge to Branch Brook and/or the Naugatuck River south of the landfill is not clear.

Bedrock groundwater flows in a general southwest direction beneath the landfill under a horizontal hydraulic gradient of approximately 0.0047 ft/ft. The bedrock groundwater flow pattern for this date is much more uniform than the July 25, 2013 flow pattern.

3.1.3 Vertical Hydraulic Gradients

The following table summarizes the vertical hydraulic gradients calculated based on the groundwater elevation data for the July 25, and October 31, 2013 gauging events (Table 1). For well couplets where the head difference measured between the two wells was less than 0.10 feet, the hydraulic gradient was considered to be negligible.

Vertical Hydraulic Gradients

July 25, 2013		October 31, 2013	
Up	Down	Up	Down
MW-37D/B	MW-31D/B	MW-31D/B	MW-31S/D
MW-41S/D	MW-32S/D	MW-41S/D	MW-32S/D
MW-42S/B	MW-61S/D	MW-41D/B	MW-61S/D
MW-44D/B	MW-62B	MW-42S/B	
MW-51D/B		MW-43S/D	
MW-61D/B		MW-51D/B	
		MW-62/B	

3.2 Groundwater Quality Discussion

Tables 2-1, 2-2, 2-3, 2-4, and 2-5 summarize the groundwater quality data for the December 2013 monitoring event. Table 2-6 summarizes the stabilized geochemical parameters measured during low flow sampling activities.

To facilitate interpretation, the groundwater quality tables and accompanying discussion have been segregated to summarize groundwater quality for the following wells:

- Table 2-1: Upgradient wells (MW-32S/D, MW-55B, and MW-63);
- Table 2-1: Wells located along the western perimeters of the landfill between the landfill and Branch Brook (MW-33 and MW-MW-61S/D/B);
- Table 2-2: Wells located along the eastern perimeter of the landfill between the landfill and the Naugatuck River (MW-50S, MW- 53D, and MW-62, and MW-62B);
- Table 2-2: Wells located in close proximity to the Pre-Envirite Waste Material located beneath the northeast driveway (MW-31S/D/B);
- Table 2-3: Wells located along the southern, downgradient perimeter of the landfill (MW-41S/D/B, MW-42S/B, MW-43S/D, and MW-44S/D/B);
- Table 2-4: Wells located interior to the landfill (MW-30, MW-51D, and MW-51B); and
- Table 2-5: Wells located across Branch Brook in the GA groundwater area to the southwest of the landfill (MW-36, MW-37D/B).

The groundwater quality data are compared to the following groundwater criteria listed the Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 27, 2013:

- Surface Water Protection Criteria (SWPC) listed in Appendix D;
- Residential and Industrial/Commercial Volatilization Criteria (R-VC and I-VC) listed in Appendix E; and
- Groundwater Protection Criteria (GPC) listed in Appendix C of the RSRs for wells MW-36, MW-37D, and MW-37B, located across Branch Brook in the GA groundwater area.

Note that the CTDEEP RSRs¹ are provided on the groundwater analytical summary tables for reference only.

¹ It should be noted that Envirite's legal counsel had advised that, according to the Regulations of Connecticut State Agencies Section 22a-133k-1(b), the RSRs do not apply to areas that are affected by discharges allowed under a ground water discharge permit issued pursuant to Section 22a-430. Envirite has held a ground water discharge permit since 1984 at the Thomaston facility. Thus, while compliance with RSRs is one indicator of potential need for remediation to CTDEEP, USEPA, and Envirite, these regulations are not strictly applicable to ground water constituent levels at the Thomaston facility.

GA Area Wells

The following summarizes the groundwater quality data for GA wells MW-36, MW-37D, and MW-37B, located to the southwest of the landfill across Branch Brook:

- No VOCs were detected above laboratory analytical Reportable Detection Limits (RDLs) in the groundwater samples collected from GA wells MW-36, MW-37D, and MW-37B.
- Of the metals analyzed, only barium (Ba), iron (Fe), sodium (Na), and zinc (Zn) were detected above RDLs. Zn was detected at concentrations below the applicable SWPC. There are no established SWPC for Ba, Fe, and Na.
- The following summarizes the groundwater quality data for GB wells located around the perimeter of the facility:

Upgradient Wells

- VOCs were not detected above RDLs in the groundwater samples collected from upgradient wells MW-32S, MW-32D, MW-55B, and MW-63.
- Of the metals analyzed, only Ba, Fe, manganese (Mn), Na, and Zn were detected above RDLs. Zn was detected at concentrations below the applicable SWPC. There are no established SWPC for Ba, Fe, Mn, and Na.

Western Perimeter Wells

- VOCs were not detected above RDLs in the groundwater samples collected from wells MW-33, MW-61S, MW-61D, and MW-61B located along the western perimeter of the landfill.
- Of the metals analyzed, only Ba, Fe, Mn, Na, and Zn were detected above RDLs. Zn was detected at concentrations below the applicable SWPC. There are no established SWPC for Ba, Fe, Mn, and Na.
- Due to the elevated turbidity measured during sampling, samples collected from MW-61S were analyzed for both total and dissolved metals. The total and dissolved barium and sodium concentrations were very similar indicating these analytes are predominantly present in the dissolved phase. In contrast, dissolved iron and manganese were not detected above RDLs, but were detected in the total metals aliquot suggesting these analytes are predominantly present in the suspended phase.

Pre-Envirite Waste Material (Northeast Driveway) Wells

- Toluene was the only VOC detected above groundwater criteria (R-VC) in the duplicate sample collected from shallow overburden well MW-31S, but not the primary sample. No other VOCS were detected at concentrations exceeding applicable groundwater criteria in the samples collected from the wells located in the immediate vicinity of the Pre-Envirite Waste Material located beneath the northeast driveway and adjacent roadway. VOCs detected above analytical RDLs in shallow overburden well MW-31S include 2-Butanone (MEK), cis-1,2-Dichloroethene (cis-1,2-DCE), Ethylbenzene, 4-Methyl-2-pentanone (MIBK), Toluene, 1,2,4-Trimethylbenzene, and Xylenes. In addition, Tetrachloroethene (PCE), Trichloroethene (TCE), and cis-1,2-DCE were detected at concentrations below applicable GW criteria in the groundwater sample collected from deep overburden well MW-31D and bedrock well MW-31B.
- Of the metals detected in the groundwater samples collected from the wells located in the immediate vicinity of the Pre-Envirite Waste Material, only arsenic (As) and Zn were detected at concentrations exceeding applicable SWPC, in the samples collected from shallow overburden well MW-31S. Additional metals detected at concentrations above analytical RDLs included Ba, chromium (Cr), Fe, Mn, Na, and nickel (Ni). There are no established SWPC for Ba, Fe, Mn, and Na.

Eastern Perimeter

- VOCs detected at concentrations above RDLs in the groundwater samples collected from the eastern perimeter of the landfill, downgradient of the Pre-Envirite Waste Material beneath the northeast driveway, include Acetone, 1,1-Dichloroethene (1,1-DCE), cis-1,2-DCE, PCE, TCE, and Vinyl Chloride (VC).
- VC, TCE, PCE, and 1,1-DCE were detected at concentrations exceeding applicable groundwater criteria in the samples collected from MW-50S and MW-53D. 1,1-DCE and VC concentrations exceeded the residential VC in the samples collected from both wells while the TCE concentration in MW-53D exceeded the residential VC. The PCE concentration detected in MW-53D exceeded the SWPC.
- Of the metals detected at concentrations above RDLs (Ba, copper [Cu], Fe, Mn, Na, Ni, and Zn), none were detected at concentrations exceeding applicable SWPC.

Southern/Downgradient Perimeter

- VOCs, including cis-1,2-dichloroethene (cis-1,2-DCE), PCE, TCE, and VC, and tert-butanol (TBA) were detected at concentrations below applicable groundwater criteria in the samples collected from wells MW-41S, MW-41D, MW-41B, MW-42S, MW-42B, MW-43S, and MW-44B, located along the downgradient, south side of the landfill.

- Of the VOCs detected in the samples collected from the wells located along the southern downgradient perimeter of the landfill, only VC was detected at concentrations exceeding the industrial/commercial volatilization criteria, in the samples collected from MW-43D and MW-44D.
- Of the metals detected in the groundwater samples collected from the wells located along the southern downgradient side of the landfill, only As, Cu, and Zn were detected at concentrations exceeding applicable SWPC, in the samples collected from MW-43S (As), MW-43D (As, Cu, and Zn), and MW-44D (As).

The following summarizes the exceedances of applicable groundwater criteria observed during the December 2013 groundwater sampling event.

Groundwater Criteria Exceedances December 2013

Well	[Analyte]	SWPC	R-VC	I/C-VC
MW-30	VC = 106 ug/l TCE = 319 ug/l PCE = 117 ug/l	- - 88 ug/l	2 ug/l 219 ug/l -	2 ug/l - -
MW-31S	Toluene = 25,500 ug/l As = 0.0042 mg/l Zn = 1.14 mg/l	- 0.004 mg/l 0.123 mg/l	23,500 ug/l - -	- - -
MW-43S	As = 0.0112 mg/l	0.004 mg/l	-	-
MW-43D	VC = 6.1 ug/l As = 0.0068 mg/l Cu = 0.653 mg/l Zn = 0.548 mg/l	- 0.004 mg/l 0.048 mg/l 0.123 mg/l	2 ug/l - - -	2 ug/l - - -
MW-44D	VC = 2.28 ug/l As = 0.0044 mg/l	- 0.004 mg/l	2 ug/l -	2 ug/l -
MW-50S	1,1-DCE = 1.22 ug/l VC = 4.89 ug/l	- -	1 ug/l 2 ug/l	- 2 ug/l
MW-51D	VC = 4.41 ug/l Cu = 0.0626 mg/l	- 0.048 mg/l	2 ug/l -	2 ug/l -
MW-53D	1,1-DCE = 2.86 ug/l VC = 31.2 ug/l TCE = 238 ug/l PCE = 112 ug/l	- - - 88 ug/l	1 ug/l 2 ug/l 219 ug/l -	- 2 ug/l - -

- indicates groundwater criteria was not exceeded or is not established.

For those metals detected at concentration above applicable SWPC (As, Cu, and Zn), Site-wide numerical averages were calculated, all of which were below the applicable SWPC as detailed below. For the non-detects, one-half the RDL was used as a surrogate value.

**Site Wide Average Concentrations
Versus
SWPC**

Metal	SWPC (mg/l)	[Site-Wide Average] (mg/l)
As	0.004	0.003
Cu	0.048	0.027
Zn	0.123	0.109

In the table below, the groundwater quality data exceeding applicable criteria during the December 2013 sampling event is compared to the most recent historical data from the December 2012 sampling round (Appendix D) conducted by VHB under the previous PCMP and sampling methodology.

**Historical Groundwater Quality Comparison
December 2012 - 2013**

Well	[Analyte] 2013	December 2012
MW-30	VC = 106 ug/l TCE = 319 ug/l PCE = 117 ug/l	ND 3.8 ug/l 5.9 ug/l
MW-31S	Toluene = 25,500 ug/l As = 0.0042 mg/l Zn = 1.14 mg/l	9,200 NT 0.301 mg/l
MW-43S	As = 0.0112 mg/l	NT
MW-43D	VC = 6.1 ug/l As = 0.0068 mg/l Cu = 0.653 mg/l Zn = 0.548 mg/l	ND NT 0.168 mg/l 0.162 mg/l
MW-44D	VC = 2.28 ug/l As = 0.0044 mg/l	ND NT

As noted above, for the wells where the December 2013 quality data exceeded groundwater criteria, VOC and metals concentrations were generally higher than the concentrations detected in the December 2012 samples. Wells MW-50S, MW-51D, and MW-53D were not sampled in conjunction with the 2012 PCMP sampling event.

Formal trend analyses will be presented in subsequent annual reports.

3.3 Surface Water Quality Discussion

Table 3 summarizes the surface water quality data for the December 2013 monitoring event. Surface water samples SW-BB-1 and SW-BB-2 were collected from Branch Brook, upstream and downstream of the landfill, respectively. SW-NR-1 and SW-NR-2 were collected from the Naugatuck River, upstream and downstream of the landfill, respectively. Figure 2 depicts the location of the surface water samples.

The surface water quality data were compared to the Numerical Water Quality Criteria for Chemical Constituents listed in the Connecticut Water Quality Standards listed, Sections 22a-426-1 to 22a-426-9, effective October 10, 2013. Specifically, the surface water quality data were compared to the Acute and Chronic Freshwater Aquatic Life Criteria listed in Table 3, Section 22a-426-9 Environmental Criteria.

- No VOCs were detected above analytical RDLs in the surface water samples from Branch Brook and the Naugatuck River.
- Of the metals analyzed, only Ba, Fe, Mn, and Na were detected above analytical RDLs and none of these metals have established Freshwater Aquatic Life Criteria.
- Although the analytical RDLs for Cd, Cu, and lead (Pb) exceeded the chronic Freshwater Aquatic Life Criteria for these analytes, only Cu is considered to be a constituent of concern. Furthermore, the 0.005 mg/l analytical RDL for copper only slightly exceeded the 0.0048 mg/l chronic Freshwater Aquatic Life Criteria.
- For the samples collected from Branch Brook and the Naugatuck River, downstream metals concentrations were generally consistent with upstream concentrations, with no significant increases in concentrations from upstream to downstream of the landfill.

3.4 Data Validation and Usability Discussion

Table 4 summarizes the QA/QC blank sample data for the December 2013 monitoring event. The QA/QC duplicate sample data are included in the groundwater and surface water quality data summary tables discussed above.

- No VOCs were detected above analytical RDLs in the equipment or trip blank QA/QC samples for this monitoring event.
- Total Suspended Solids (TSS) were detected at a concentration of 7 mg/l in the December 23 groundwater equipment blank, just above the 5 mg/l RDL.
- Mn was detected at 0.0088 mg/l in the surface water equipment blank, above the 0.002 mg/l RDL.

- The groundwater and surface water duplicate sample results for this monitoring event were consistent with the primary sample results and do not indicate an issue with analytical precision.

Appendix E contains the data validation report prepared to assess the validity and usability of laboratory analytical data generated from samples collected during expanded groundwater monitoring event December 2013 event at the Envirite RCRA Facility from December 16, 2013 through December 20, 2013, December 23, 2013 and December 27, 2013.

The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the ENVIRON's QAPP/ SAP for the Site (December 2013), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, (January, 2010).

This data validation report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness and comparability relative to the project data quality objectives. The report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability of the data.

Per the December 2013 QAPP/SAP, a USEPA Tier I data validation was performed on all laboratory data. The QAPP/SAP indicated that a minimum of 10% of the data would undergo USEPA Tier II data validation. Data package SDG SB82197 was selected for Tier II analysis to meet validation requirements. In addition, several samples also underwent Tier II data validation in order to meet project requirements.

The results of the data validation efforts indicate the data are usable for its intended purpose based on an evaluation of the QC parameters discussed in the data validation report. Some data are qualified as estimated due to the inability to meet all QC criteria. The table below summarizes the final qualifications for the analytical data.

Data Qualifier Summary

Field ID	Analysis	Analyte	Qualifier	Reason Code
MW-50S/20131218	6010	Sodium	J	1
MW-50S/20131218	6010	Manganese	J	1
MW-43S/20131220	6010	Sodium	J	1

Data Validation Qualifier Codes:

J = Estimated. The associated numerical value is an estimated quantity. The analyte was detected but the reported value may not be accurate or precise.

Data Qualifier Reason Codes:

1 Matrix Spike/Matrix Spike Duplicate or RPDs were outside of quality control parameters.

4 Conclusions and Recommendations

ENVIRON has completed the one-time expanded environmental monitoring event documented in the QAPP/SAP, dated December 3, 2013. No significant data anomalies were identified during this sampling event; therefore, ENVIRON recommends that the environmental monitoring program detailed in the QAPP/SAP continue to be implemented as proposed.

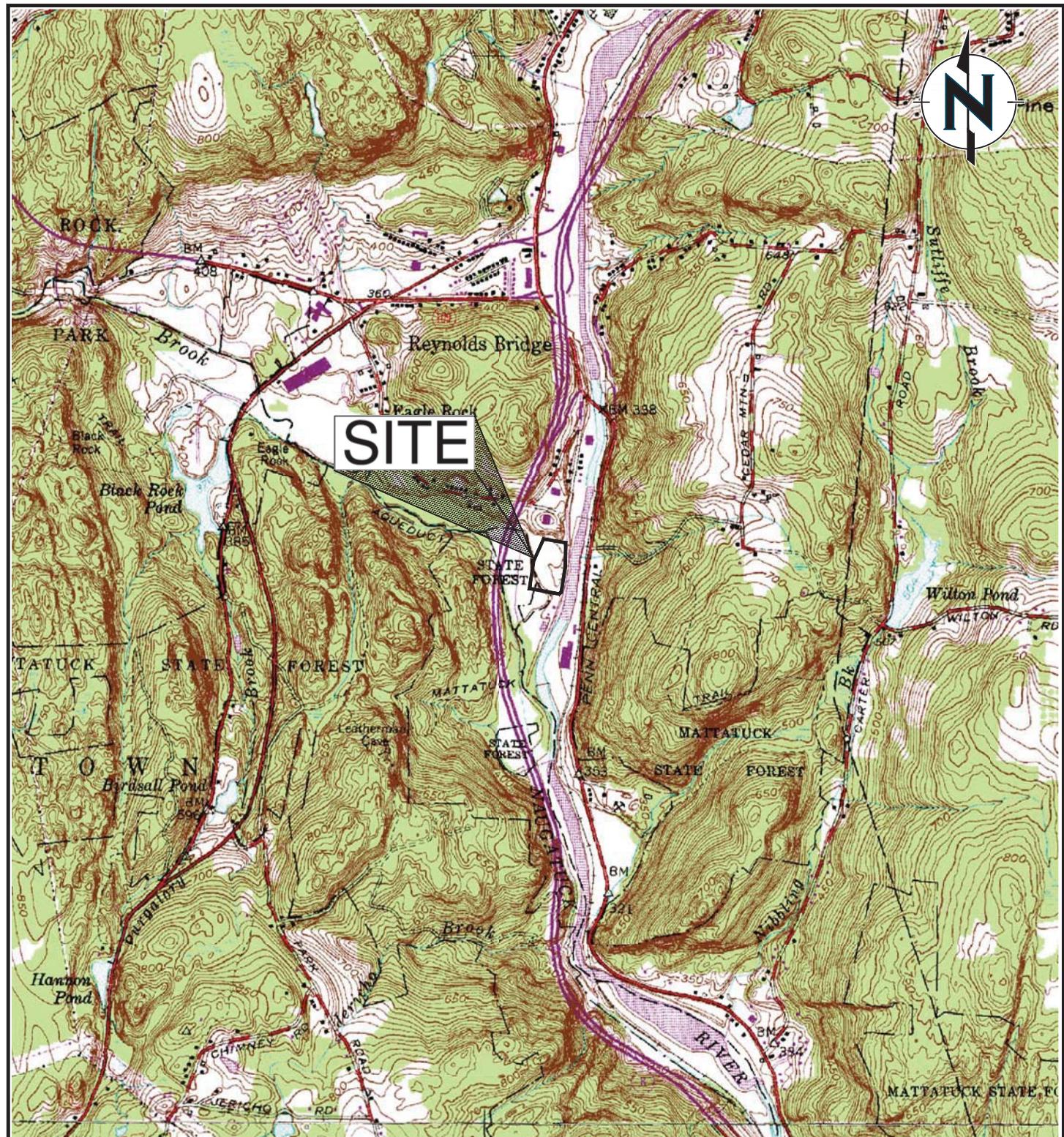
The next scheduled environmental monitoring event is a semi-annual PCMP event slated for April 2014. The following provides the current status of the Project activities and schedule for the remainder of 2014.

Project Timetable

Task	Description	Status	Schedule
1	Groundwater Monitoring Well Elevation Surveys	Completed	July and October 2013
2	Expanded Groundwater and Surface Water Monitoring Event	Completed	December 2013
3	Quarterly Groundwater and Surface Water Gauging	Completed Completed Pending	July and October 2013; February 2014 April, July, and October 2014
4	Sediment Sampling Program (Naugatuck River)	Pending	August 2014
5	Interim Semi-Annual Post-Closure Monitoring Sampling Event	Pending	April 2014
6	Implementation of Revised Semi-Annual Post-Closure Monitoring Plan	Pending	September 2014
7	Development of Revised Surface Water Protection Criteria or Document Compliance with SWPC	Pending	November 2014

The implications with respect to Site closure will be revisited following the completion of the 2014 groundwater, surface water, and Naugatuck River sediment investigation activities and the subsequent development of revised SWPC or documented compliance with SWPC.

FIGURES



SOURCE: U.S. Geological Survey 7.5 minute (topographic) quadrangles; Thomaston, and Waterbury, Connecticut.

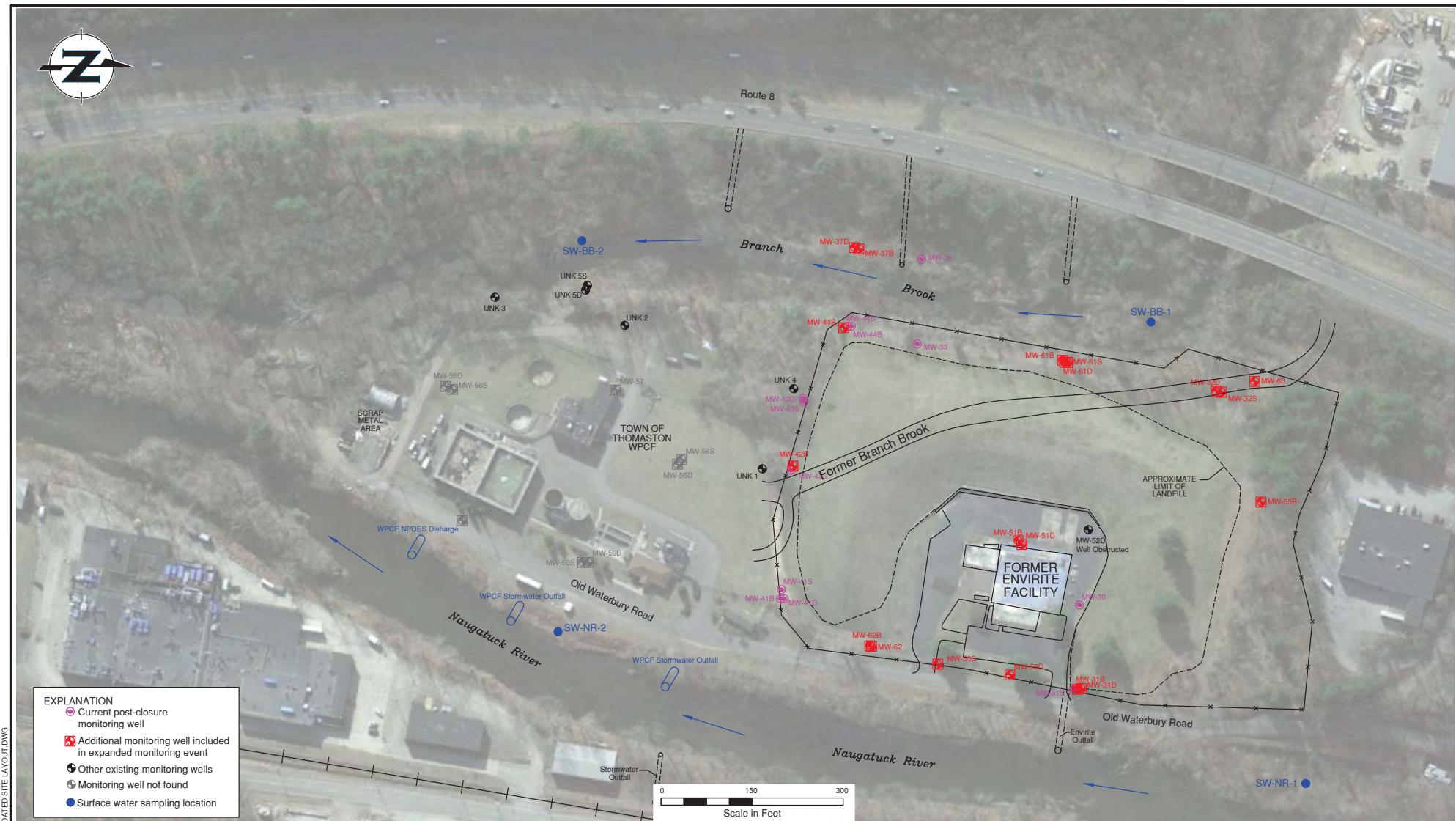


ENVIRON

Site Location Map

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Figure
1



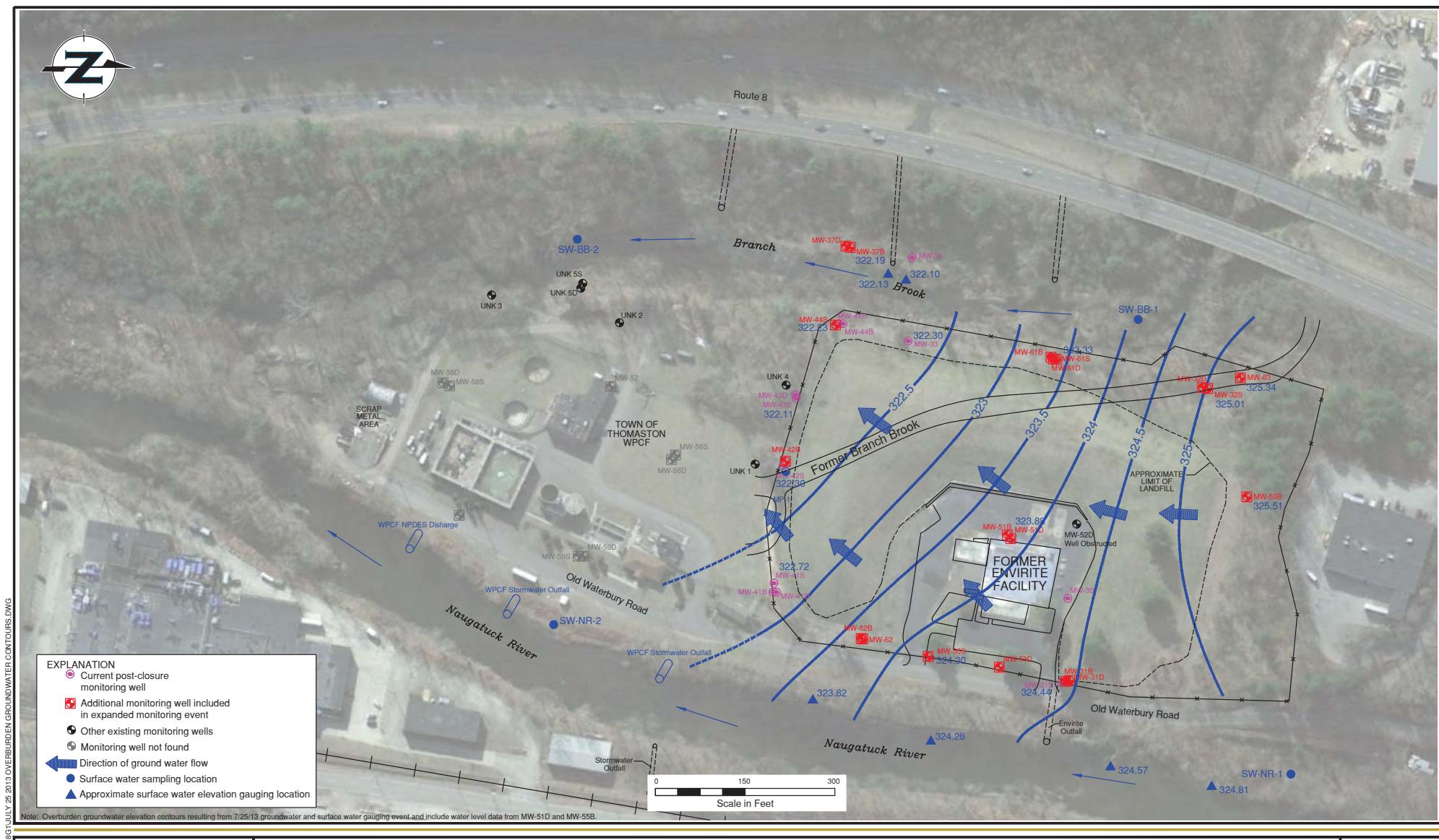
C:\PROJECTS\08-142189\1\UPDATED SITE LAYOUT.DWG



DRAFTED BY: GMILES DATE: 2/25/2014

Environmental Monitoring Locations Site Plan
Envirite RCRA Facility
Old Waterbury Road, Thomaston, Connecticut

Figure
2

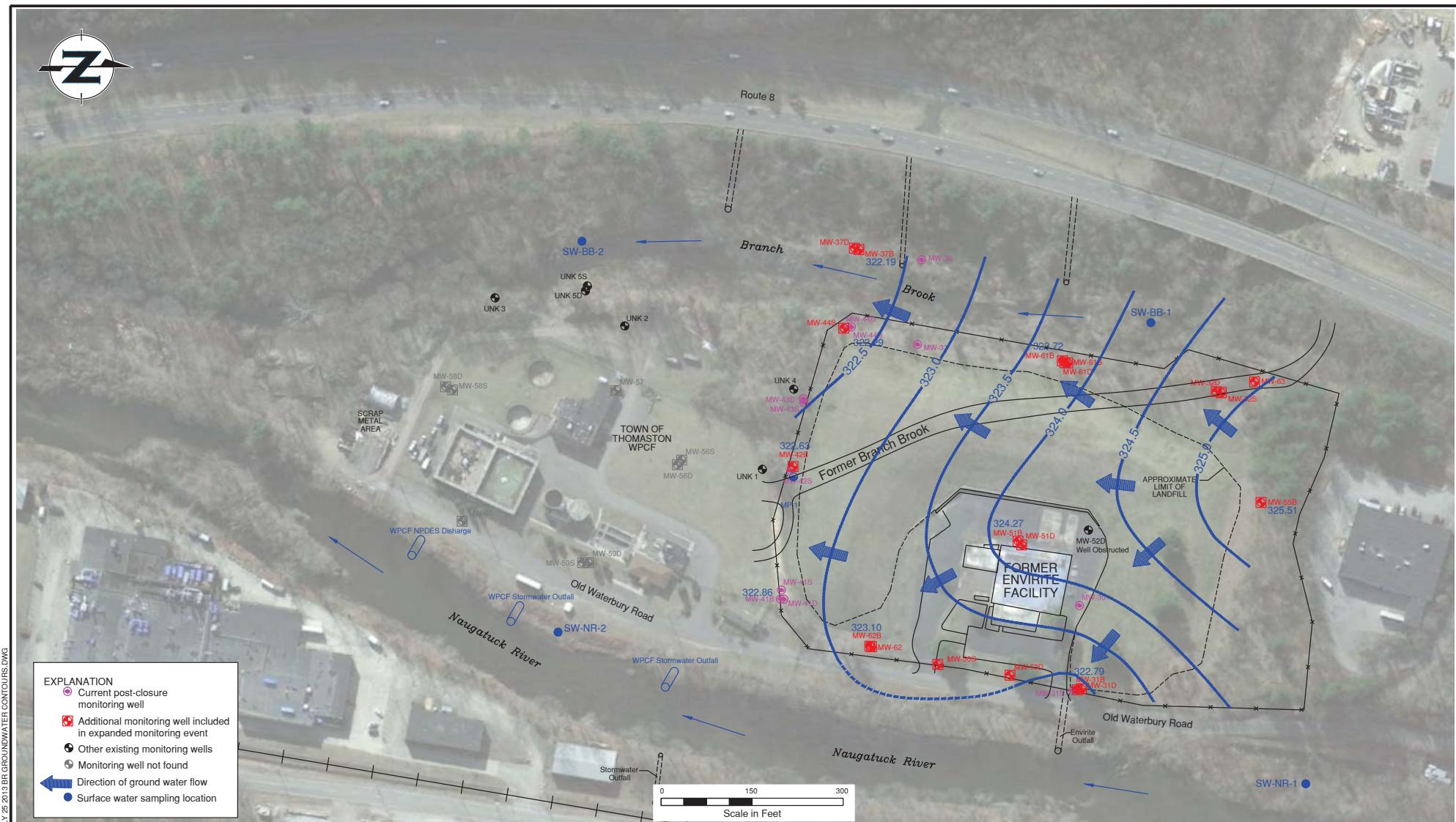


DRAFTED BY: VCMILE6

DRAFTED BY: AGMILES DATE: 2/23/2014

**Environmental Monitoring Locations Site Plan
July 25, 2013 Overburden Groundwater Elevation Contours
Envirite RCRA Facility**

Figure 3-1



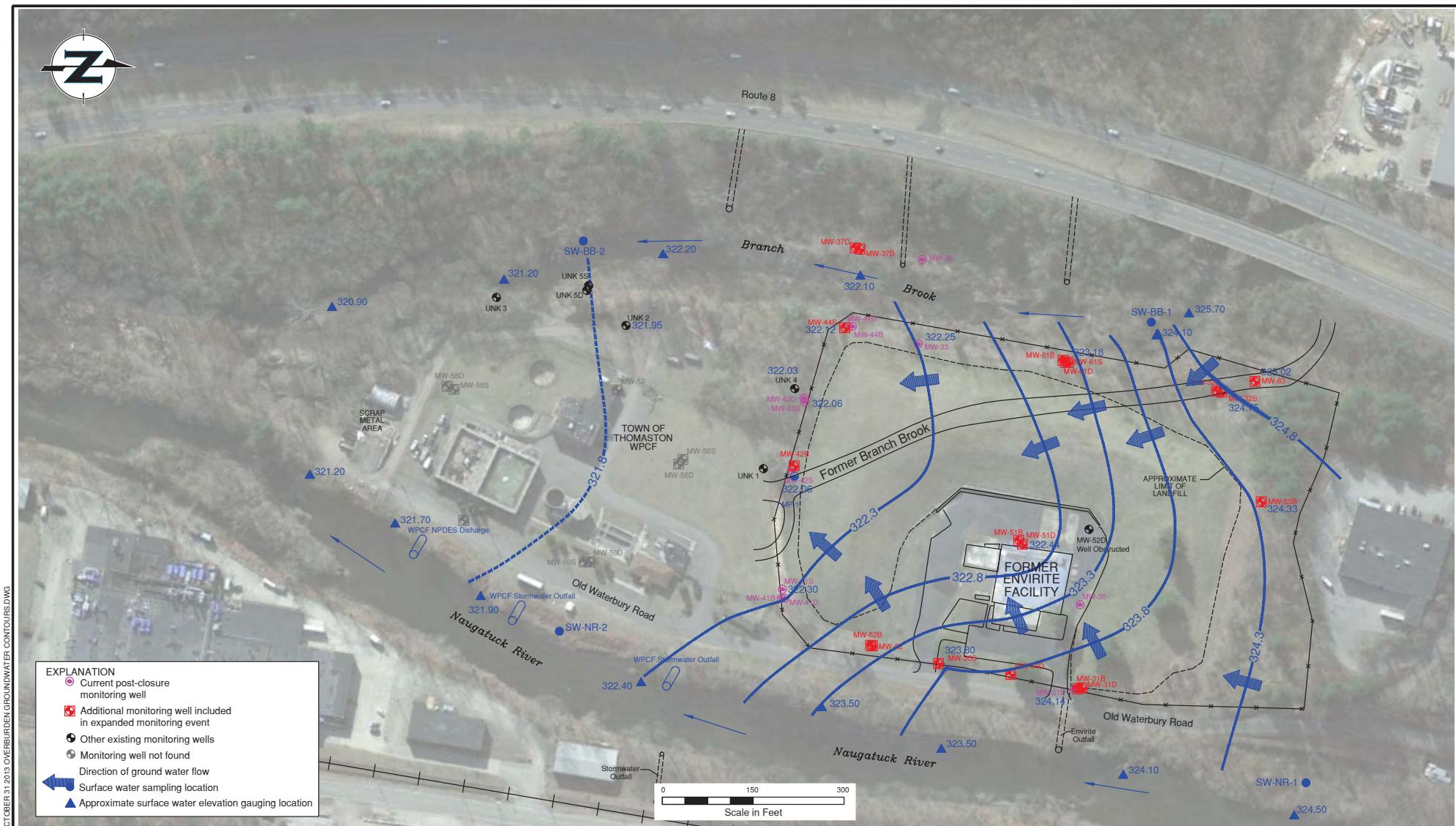
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3/20/2014

Environmental Monitoring Locations Site Plan July 25, 2013 Bedrock Groundwater Elevation Contours

Envirite RCRA Facility

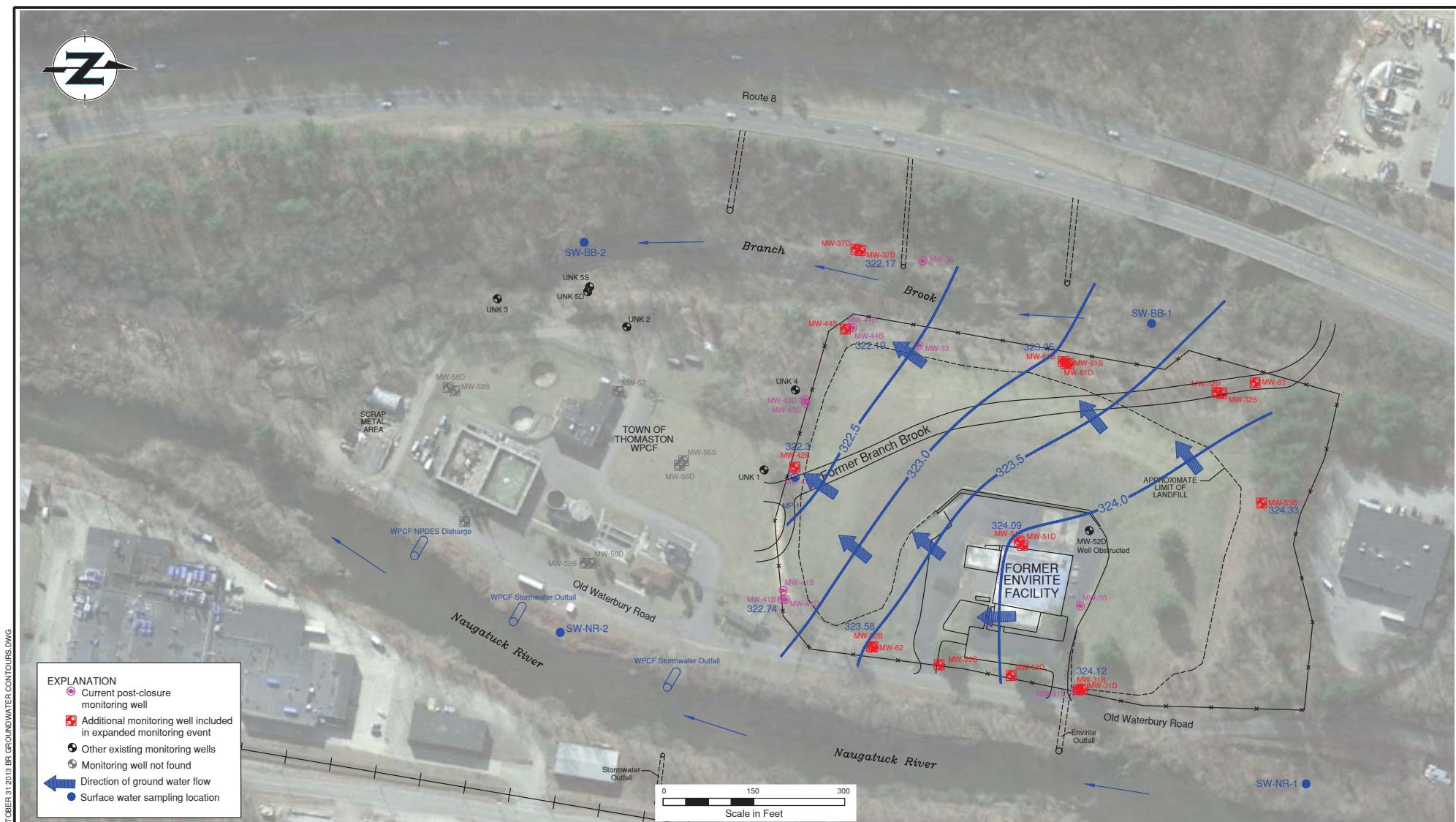
Figure 3-2



**Environmental Monitoring Locations Site Plan
October 31, 2013 Overburden Groundwater Elevation Contours**

Envirite RCRA Facility
Old Waterbury Road, Thomaston, Connecticut

Figure
4-1



TABLES

TABLE 1
Groundwater Elevation Data and Vertical Hydraulic Gradients
July and October 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Well	Screened Interval		Type	Ground Elevation (feet)	TOC Elevation (feet)	Stickup (feet)	7/25/13			10/31/13		
	Top (feet bgs)	Bottom (feet bgs)					Depth to Water (ft BTOC)	Groundwater Elevation (feet)	Vertical Gradient (feet/foot)	Depth to Water (ft BTOC)	Groundwater Elevation (feet)	Vertical Gradient (feet/foot)
MW-30	38	48	DOB	342.13	341.74	-0.39	17.33	324.41	NA	17.87	323.87	NA
MW-31S	17	27	OB	340.13	340.29	0.16	15.85	324.44	0.0028	16.15	324.14	0.0180
MW-31D	26.5	31.5	DOB	339.90	341.77	1.87	17.35	324.42	0.1254	17.76	324.01	-0.0085
MW-31B	37	47	BR	339.90	341.79	1.89	19.00	322.79		17.67	324.12	
MW-32S	14	24	OB	340.06	340.66	0.60	15.65	325.01	0.0243	15.91	324.75	0.0258
MW-32D	24.5	39.5	DOB	339.87	340.37	0.50	15.68	324.69		15.96	324.41	
MW-33	15	25	OB	339.05	340.47	1.42	18.17	322.30		18.22	322.25	
MW-36	21.5	31.5	DOB	326.77	328.74	1.97	6.41	322.33		6.48	322.26	
MW-37D	27	32	DOB	325.55	327.53	1.98	5.43	322.10	-0.0029	5.40	322.13	-0.0013
MW-37B	55.7	65.7	BR	325.53	327.39	1.86	5.20	322.19		5.22	322.17	
MW-41S	10	20	OB	332.94	334.73	1.79	12.01	322.72	-0.0232	12.43	322.30	-0.0263
MW-41D	17	32	OB	332.94	334.48	1.54	11.54	322.94	0.0031	11.93	322.55	-0.0074
MW-41B	45	55	BR	332.83	334.61	1.78	11.75	322.86		11.87	322.74	
MW-42S	22.5	32.5	OB	339.55	341.16	1.61	18.86	322.30	-0.0079	19.10	322.06	-0.0057
MW-42B	65	75	BR	340.09	342.15	2.06	19.52	322.63		19.85	322.30	
MW-43S	22.5	32.5	OB	339.26	340.41	1.15	18.30	322.11	-0.0006	18.35	322.06	-0.0070
MW-43D	58	68	DOB	339.21	340.65	1.44	18.52	322.13		18.34	322.31	
MW-44S	17	27	OB	337.97	338.63	0.66	16.40	322.23	-0.0002	16.51	322.12	0.0004
MW-44D	62	72	OB	338.01	339.23	1.22	16.99	322.24	-0.0038	17.13	322.10	-0.0068
MW-44B	75	85	BR	337.73	340.29	2.56	18.00	322.29		18.10	322.19	
MW-50S	13.7	18.7	OB	336.30	337.69	1.39	13.39	324.30		13.89	323.80	
MW-51D	18.3	28.3	OB	340.79	340.41	-0.38	16.53	323.88	-0.0192	17.97	322.44	-0.0814
MW-51B	38.5	48.5	BR	340.73	340.27	-0.46	16.00	324.27		16.18	324.09	
MW-52D	43.5	58.5	OB	342.86	342.47	-0.39	N/M			N/M		
MW-53D	25	40	OB	338.18	339.77	1.59	15.29	324.48		15.77	324.00	
MW-55B	15	25	BR	339.81	341.28	1.47	15.77	325.51		16.95	324.33	
MW-56S	7.0	12.0	OB				N/M			N/M		
MW-56D	49	54	OB				N/M			N/M		
MW-57	7.0	12.0	OB				N/M			N/M		
MW-58S	6.0	11.0	OB				N/M			N/M		
MW-58D	68.5	75.1	OB				N/M			N/M		
MW-59S	5.0	15.0	OB				N/M			N/M		
MW-59D	40	50	OB				N/M			N/M		
MW-60	4	14	OB				N/M			N/M		
MW-61S	14	20	OB	337.31	339.34	2.03	16.01	323.33	0.0073	16.16	323.18	0.0050
MW-61D	42	52	OB	337.34	339.36	2.02	16.25	323.11	-0.0360	16.33	323.03	-0.0012
MW-61B	59	69	BR	337.38	339.54	2.16	15.82	323.72		16.49	323.05	
MW-62	19	21	OB	336.90	338.53	1.63	14.69	323.84	0.0670	15.09	323.44	-0.0127
MW-62B	26	36	BR	336.86	338.61	1.75	15.51	323.10		15.03	323.58	
MW-63	14.5	24.5	OB	343.05	342.69	-0.36	17.35	325.34		17.67	325.02	
UNK-1	Unknown		?	334.14	N/M	-	N/M	-	-	N/M	-	-
UNK-2	Unknown	19.53	?	333.47	334.61	1.14	N/M	-	-	12.66	321.95	-
UNK-3	Unknown	35.28	?	329.54	330.75	1.21	N/M	-	-	9.30	321.45	-
UNK-4	Unknown	27.14	?	338.22	339.75	1.53	N/M	-	-	17.72	322.03	-

Indicates well is located across Branch Brook

Indicates well is located off Site on Thomaston POTW property and adjacent roadway

Indicates groundwater elevation used to generate overburden groundwater elevation contours

Indicates upward hydraulic gradient

TABLE 2-1

Groundwater Quality Data
North and West of Facility
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Sampling Location			MW-32S		MW-32D		MW-33		MW-55B		MW-61S		MW-61S Filtered		MW-61D		MW-61B		MW-63		
	CT RSRs			12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013		
	Indicator Parameters (mg/l)	I/C VC	RES VC	SWPC	Result	RDL	Result	RDL	Result	RDL	Result	RDL										
Chloride	-	-	-	-	187	10	197	10	33.3	1	38.1	1	80.5	2	-	-	196	8	94	10	208	10
Nitrate as N	-	-	-	-	1.16	1	1.1	1	2.1	0.1	0.156	0.1	1.03	0.2	NT	NT	1.07	0.1	1.96	1	1.06	1
Nitrite as N	-	-	-	-	BRL	1	BRL	1	BRL	0.1	BRL	0.1	BRL	0.2	NT	NT	BRL	0.1	BRL	1	BRL	1
Sulfate as SO4	-	-	-	-	23.6	10	23.1	10	31.4	1	10.5	1	23.1	2	NT	NT	30.5	1	78.1	10	30.3	10
Cyanide (total)	-	-	0.052	BRL	0.005	BRL	0.005	NT	NT	BRL	0.005	BRL	0.005									
Ammonia as N	-	-	-	-	BRL	0.1	NT	NT	BRL	0.1	BRL	0.1	BRL	0.1								
Total Organic Carbon	-	-	-	-	1.6	1	1.45	1	3.35	1	1.58	1	2.3	1	NT	NT	BRL	1	1.76	1	1.66	1
Total Dissolved Solids	-	-	-	-	376	5	370	5	136	5	109	5	190	5	NT	NT	385	5	391	5	437	5
Total Suspended Solids	-	-	-	-	BRL	5	BRL	5	BRL	5	BRL	5	12	5	NT	NT	BRL	5	BRL	5	BRL	5
Total Metals (mg/l)																						
Arsenic	-	-	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	
Barium	-	-	0.0576	0.005	0.0664	0.005	0.0314	0.005	0.0414	0.005	0.042	0.005	0.0401	0.005	0.0649	0.005	0.007	0.005	0.0604	0.005		
Cadmium	-	-	0.006	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025									
Chromium	-	-	0.11	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005									
Copper	-	-	0.048	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005									
Iron	-	-	-	BRL	0.015	BRL	0.015	BRL	0.0268	0.015	0.226	0.015	0.62	0.015	BRL	0.015	0.0179	0.015	0.0191	0.015	0.0664	0.015
Manganese	-	-	-	0.0038	0.002	0.0025	0.002	0.0048	0.002	0.0081	0.002	0.0078	0.002	BRL	0.002	0.0037	0.002	0.0023	0.002	0.0041	0.002	
Sodium	-	-	-	113	25	117	25	22.6	5	18.2	25	54.6	25	57	25	102	5	28	25	126	25	
Nickel	-	-	0.88	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005									
Lead	-	-	0.013	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075									
Zinc	-	-	0.123	0.0288	0.0075	0.0136	0.0075	BRL	0.005	0.0194	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.005	0.0083	0.0075	0.0344	0.0075	
Volatile Organic Compounds (µg/l)																						
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Acetone	50000	50000	-	BRL	10	BRL	10	BRL	10	BRL	10	NT	NT	BRL	10	BRL	10	BRL	10	BRL	10	
Acrylonitrile	-	-	20	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Benzene	530	215	710	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Bromobenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Bromochloromethane	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Bromodichloromethane	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Bromoform	3800	920	10800	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Bromomethane	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2	
2-Butanone (MEK)	50000	50000	-	BRL	10	BRL	10	BRL	10	BRL	10	NT	NT	BRL	10	BRL	10	BRL	10	BRL	10	
n-Butylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
sec-Butylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
tert-Butylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Carbon disulfide	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2	
Carbon tetrachloride	40	16	132	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Chlorobenzene	6150	1800	420000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Chloroethane	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2	
Chloroform	710	287	14100	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Chloromethane	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2	
2-Chlorofluorocane	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
4-Chlorotoluene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,2-Dibromo-3-chloropropane	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Dibromochloromethane	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
1,2-Dibromoethane (EDB)	16	4	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Dibromomethane	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,2-Dichlorobenzene	50000	30500	170000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,3-Dichlorobenzene	50000	24200	26000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,4-Dichlorobenzene	50000	50000	26000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
Dichlorodifluoromethane (Freon12)	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2	
1,1-Dichloroethane	50000	34600	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,2-Dichloroethane	90	21	2970	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,1-Dichloroethene	6	1	96	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
cis-1,2-Dichloroethene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
trans-1,2-Dichloroethene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,2-Dichloropropane	60	14	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,3-Dichloropropane	-	-	-	34000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
2,2-Dichloropropane	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
1,1-Dichloropropene	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1	
cis-1,3-Dichloropropene	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	

TABLE 2-1

Groundwater Quality Data
North and West of Facility
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Sampling Location			MW-32S		MW-32D		MW-33		MW-55B		MW-61S		MW-61S Filtered		MW-61D		MW-61B		MW-63	
	CT RSRs			Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL								
	I/C VC	RES VC	SWPC																		
trans-1,3-Dichloropropene	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Ethylbenzene	50000	50000	580000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Hexachlorobutadiene	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
2-Hexanone (MBK)	-	-	-	BRL	10	BRL	10	BRL	10	BRL	10	NT	NT	BRL	10	BRL	10	BRL	10	BRL	10
Isopropylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
4-Isopropyltoluene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Methyl tert-butyl ether	50000	50000	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
4-Methyl-2-pentanone (MIBK)	50000	50000	-	BRL	10	BRL	10	BRL	10	BRL	10	NT	NT	BRL	10	BRL	10	BRL	10	BRL	10
Methylene chloride	50000	50000	48000	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2
n-Propylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Naphthalene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Styrene	2065	580	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2-Tetrachloroethane	50	12	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2,2-Tetrachloroethane	100	23	110	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	NT	NT	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Tetrachloroethene	3820	1500	88	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Toluene	50000	23500	4000000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichlorobenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trichlorobenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,3,5-Trichlorobenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,1,1-Trichloroethane	50000	20400	62000	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2-Trichloroethane	19600	8000	1260	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Trichloroethene	540	219	2340	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Trichlorofluoromethane (Freon 11)	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichloropropane	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trimethylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
1,3,5-Trimethylbenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Vinyl chloride	2	2	15750	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
m,p-Xylene	50000	21300	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2
o-Xylene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Tetrahydrofuran	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	NT	NT	BRL	2	BRL	2	BRL	2	BRL	2
Ethyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Tert-amyl methyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Ethyl tert-butyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Di-isopropyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	NT	NT	BRL	1	BRL	1	BRL	1	BRL	1
Tert-Butanol / butyl alcohol	-	-	-	BRL	10	BRL	10	BRL	10	BRL	10	NT	NT	BRL	10	BRL	10	BRL	10	BRL	10
1,4-Dioxane	-	-	-	BRL	20	BRL	20	BRL	20	BRL	20	NT	NT	BRL	20	BRL	20	BRL	20	BRL	20
trans-1,4-Dichloro-2-butene	-	-	-	BRL	5	BRL	5	BRL	5	BRL	5	NT	NT	BRL	5	BRL	5	BRL	5	BRL	5
Ethanol	-	-	-	BRL	400	BRL	400	BRL	400	BRL	400	NT	NT	BRL	400	BRL	400	BRL	400	BRL	400

Notes

1. Groundwater criteria taken from Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 26, 2013
2. SWPC = Surface Water Protection Criteria
3. VC = Volatilization Criteria. (I/C = Industrial/Commercial; RES = Residential)
4. - indicates RSR standard not established.
5. RDL = Reportable Detection Limit
6. BRL = Below Reporting Limit
7. Blue indicates RDL above RSR criteria.
8. Red indicates concentration exceeds RSR criteria.
9. Chromium SWPC indicates hexavalent chromium.
10. MW-61S Filtered field-filtered for soluble metals.

TABLE 2-2

Groundwater Quality Data
East of Facility
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Sampling Location			MW-31S		MW-31S (DUP)		MW-31D		MW-31B		MW-50S		MW-53D		MW-62		MW-62B	
	CT RSRs			12/23/2013		12/23/2013		12/20/2013		12/23/2013		12/18/2013		12/18/2013		12/16/2013		12/16/2013	
	I/C VC	RES VC	SWPC	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL
Indicator Parameters (mg/l)																			
Chloride	-	-	-	115	5	136	5	48.9	1	309	24	200	10	375	26	116	7	16	1
Nitrate as N	-	-	-	BRL	0.1	BRL	0.1	0.79	0.1	43.3	2.4	20.9	1	63.2	2.6	8.07	0.7	BRL	0.1
Nitrite as N	-	-	-	BRL	0.1	BRL	0.1	BRL	0.1	BRL	0.1	BRL	0.1	BRL	0.1	BRL	0.1	BRL	0.1
Sulfate as SO4	-	-	-	BRL	1	BRL	1	110	4	629	24	272	10	698	26	173	7	174	7
Cyanide (total)	-	-	0.052	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005
Ammonia as N	-	-	-	12.8	0.5	12.8	0.4	1.06	0.1	BRL	0.1	0.473	0.1	2.17	0.1	BRL	0.1	BRL	0.1
Total Organic Carbon	-	-	-	129	40	144	40	1.75	1	5.95	1	3.4	1	4.69	1	2.06	1	3.42	1
Total Dissolved Solids	-	-	-	466	5	478	5	313	5	1850	5	885	5	2040	10	528	5	403	5
Total Suspended Solids	-	-	-	30	5	31	5	BRL	5	BRL	5	BRL	5	BRL	5	12	5	5	5
Total Metals (mg/l)																			
Arsenic	-	-	0.004	BRL	0.004	0.0042	0.004	BRL	0.004										
Barium	-	-	0.0971	0.005	0.0978	0.005	0.0162	0.005	0.0289	0.005	0.101	0.005	0.0308	0.005	0.12	0.005	0.0204	0.005	
Cadmium	-	-	0.006	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025
Chromium	-	-	0.11	0.0174	0.005	0.0176	0.005	BRL	0.005										
Copper	-	-	0.048	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	0.0092	0.005	BRL	0.005
Iron	-	-	-	82.6	0.015	82	0.015	0.4	0.015	BRL	0.015	0.0604	0.015	0.374	0.015	1.59	0.015	0.0818	0.015
Manganese	-	-	-	4.14	0.0043	4.14	0.0043	0.182	0.002	0.0352	0.0043	6.82	0.01	6.21	0.01	2.34	0.002	0.013	0.002
Sodium	-	-	-	40.5	0.35	40.9	0.35	29.4	5	88.8	0.35	109	5	227	5	73.2	0.25	43.7	0.25
Nickel	-	-	0.88	0.0614	0.005	0.064	0.005	BRL	0.005	0.131	0.005	0.0118	0.005	0.0296	0.005	0.0092	0.005	0.011	0.005
Lead	-	-	0.013	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075
Zinc	-	-	0.123	1.11	0.005	1.14	0.005	0.0099	0.005	0.0342	0.005	0.0782	0.0485	BRL	0.0485	BRL	0.1	BRL	0.1
Volatile Organic Compounds (µg/l)																			
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	-	-	BRL	500	BRL	500	BRL	1										
Acetone	50000	50000	-	BRL	5000	BRL	5000	BRL	10	BRL	10	BRL	10	BRL	10	17.3	10		
Acrylonitrile	-	-	20	BRL	250	BRL	250	BRL	0.5										
Benzene	530	215	710	BRL	500	BRL	500	BRL	1										
Bromobenzene	-	-	-	BRL	500	BRL	500	BRL	1										
Bromochloromethane	-	-	-	BRL	250	BRL	250	BRL	0.5										
Bromodichloromethane	-	-	-	BRL	500	BRL	500	BRL	1										
Bromoform	3800	920	10800	BRL	1000	BRL	1000	BRL	2										
Bromomethane	-	-	-	BRL	500	BRL	500	BRL	1										
2-Butanone (MEK)	50000	50000	-	10400	10000	7700	5000	BRL	10										
n-Butylbenzene	-	-	-	BRL	500	BRL	500	BRL	1										
sec-Butylbenzene	-	-	-	BRL	500	BRL	500	BRL	1										
tert-Butylbenzene	-	-	-	BRL	1000	BRL	1000	BRL	2										
Carbon disulfide	-	-	-	BRL	500	BRL	500	BRL	1										
Carbon tetrachloride	40	16	132	BRL	500	BRL	500	BRL	1										
Chlorobenzene	6150	1800	420000	BRL	500	BRL	500	BRL	1										
Chloroethane	-	-	-	BRL	1000	BRL	1000	BRL	2										
Chloroform	710	287	14100	BRL	500	BRL	500	BRL	1										
Chloromethane	-	-	-	BRL	1000	BRL	1000	BRL	2										
2-Chlorotoluene	-	-	-	BRL	500	BRL	500	BRL	1										
4-Chlorotoluene	-	-	-	BRL	500	BRL	500	BRL	1										
1,2-Dibromo-3-chloropropane	-	-	-	BRL	1000	BRL	1000	BRL	2										
Dibromochloromethane	-	-	-	BRL	250	BRL	250	BRL	0.5										
1,2-Dibromoethane (EDB)	16	4	-	BRL	250	BRL	250	BRL	0.5										
Dibromomethane	-	-	-	BRL	500	BRL	500	BRL	1										
1,2-Dichlorobenzene	50000	30500	170000	BRL	500	BRL	500	BRL	1										
1,3-Dichlorobenzene	50000	24200	26000	BRL	500	BRL	500	BRL	1										
1,4-Dichlorobenzene	50000	50000	26000	BRL	500	BRL	500	BRL	1										
Dichlorodifluoromethane (Freon12)	-	-	-	BRL	1000	BRL	1000	BRL	2										
1,1-Dichloroethane	50000	34600	-	BRL	500	BRL	500	BRL	1										
1,2-Dichloroethane	90	21	2970	BRL	500	BRL	500	BRL	1										
1,1-Dichloroethene	6	1	96	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	1	1.25	1	BRL	1
cis-1,2-Dichloroethene	-	-	-	7820	1000	9280	1000	9.41	1	33.5	1	141	5	521	20	.85	1	BRL	1
trans-1,2-Dichloroethene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	1	2.86	1	BRL	1
1,2-Dichloropropene	60	14	-	34000	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	1	0.5	BRL	1
1,3-Dichloropropene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	1	20	BRL	1	

TABLE 2-2

Groundwater Quality Data
East of Facility
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Sampling Location			MW-31S		MW-31S (DUP)		MW-31D		MW-31B		MW-50S		MW-53D		MW-62		MW-62B		
	CT RSRs			12/23/2013		12/23/2013		12/20/2013		12/23/2013		12/18/2013		12/18/2013		12/16/2013		12/16/2013		
	I/C VC	RES VC	SWPC	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	
2,2-Dichloropropane	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	BRL	1	
1,1-Dichloropropene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	BRL	1	
cis-1,3-Dichloropropene	-	-	-	BRL	250	BRL	250	BRL	0.5	BRL	0.5	BRL	0.5	BRL	10	BRL	0.5	BRL	0.5	
trans-1,3-Dichloropropene	-	-	-	BRL	250	BRL	250	BRL	0.5	BRL	0.5	BRL	0.5	BRL	10	BRL	0.5	BRL	0.5	
Ethylbenzene	50000	50000	580000	5200	1000	6610	1000	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	BRL	1	
Hexachlorobutadiene	-	-	-	BRL	250	BRL	250	BRL	0.5	BRL	0.5	BRL	0.5	BRL	10	BRL	0.5	BRL	0.5	
2-Hexanone (MBK)	-	-	-	BRL	5000	BRL	5000	BRL	10	BRL	10	BRL	10	BRL	200	BRL	10	BRL	10	
Isopropylbenzene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
4-Isopropyltoluene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Methyl tert-butyl ether	50000	50000	-	38500	10000	35200	10000	BRL	10	BRL	10	BRL	10	BRL	200	BRL	10	BRL	10	
4-Methyl-2-pentanone (MIBK)	50000	50000	-	38500	10000	35200	10000	BRL	10	BRL	10	BRL	10	BRL	200	BRL	10	BRL	10	
Methylene chloride	50000	50000	48000	BRL	1000	BRL	1000	BRL	2	BRL	2									
Naphthalene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1									
n-Propylbenzene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1									
Styrene	2065	580	-	BRL	500	BRL	500	BRL	1	BRL	1									
1,1,1,2-Tetrachloroethane	50	12	-	BRL	500	BRL	500	BRL	1	BRL	1									
1,1,2,2-Tetrachloroethane	100	23	110	BRL	250	BRL	250	BRL	0.5	BRL	0.5									
Tetrachloroethene	3820	1500	88	BRL	500	500	500	BRL	3.7	1	2.07	1	24.4	5	112	20	23.2	1	BRL	1
Toluene	50000	23500	4000000	23200	1000	25500	1000	BRL	1	BRL	1									
1,2,3-Trichlorobenzene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,2,4-Trichlorobenzene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,3,5-Trichlorobenzene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,1,1-Trichloroethane	50000	20400	62000	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,1,2-Trichloroethane	19600	8000	1260	BRL	500	BRL	500	BRL	1	BRL	1									
Trichloroethene	540	219	2340	BRL	500	BRL	500	BRL	4.21	1	14.9	1	52.4	5	238	1	37.3	1	BRL	1
Trichlorofluoromethane (Freon 11)	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,2,3-Trichloropropane	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,2,4-Trimethylbenzene	-	-	-	660	500	595	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
1,3,5-Trimethylbenzene	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Vinyl chloride	2	2	15750	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
m,p-Xylene	50000	21300	-	13400	1000	13400	1000	BRL	2	BRL	2	BRL	2	BRL	40	BRL	2	BRL	2	
o-Xylene	-	-	-	5080	500	5100	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Tetrahydrofuran	-	-	-	BRL	1000	BRL	1000	BRL	2	BRL	2	BRL	2	BRL	40	BRL	2	BRL	2	
Ethyl ether	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Tert-amyl methyl ether	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Ethyl tert-butyl ether	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Di-isopropyl ether	-	-	-	BRL	500	BRL	500	BRL	1	BRL	1	BRL	1	BRL	20	BRL	1	BRL	1	
Tert-Butanol / butyl alcohol	-	-	-	BRL	5000	BRL	5000	BRL	10	BRL	10	BRL	10	BRL	200	BRL	10	90.8	10	
1,4-Dioxane	-	-	-	BRL	10000	BRL	10000	BRL	20	BRL	20	BRL	20	BRL	400	BRL	20	BRL	20	
trans-1,4-Dichloro-2-butene	-	-	-	BRL	2500	BRL	2500	BRL	5	BRL	5	BRL	5	BRL	100	BRL	5	BRL	5	
Ethanol	-	-	-	BRL	200000	BRL	200000	BRL	400	BRL	400	BRL	400	BRL	8000	BRL	400	BRL	400	

Notes

1. Groundwater criteria taken from Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 26, 2013.
2. SWPC = Surface Water Protection Criteria.
3. VC = Volatilization Criteria. (I/C = Industrial/Commercial; RES = Residential)
4. - indicates RSR standard not established.
5. RDL = Reportable Detection Limit
6. BRL = Below Reporting Limit
7. Blue indicates RDL above RSR criteria.
8. Red indicates concentration exceeds RSR criteria.
9. Chromium SWPC indicates hexavalent chromium.

TABLE 2-3

Groundwater Quality Data
South/Downgradient of Facility
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

TABLE 2-3

Groundwater Quality Data
South/Downgradient of Facility
December 2013

Envrite RCRA Landfill
 Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Sampling Location				MW-41S		MW-41D		MW-41B		MW-42S		MW-42B		MW-43S		MW-43S (DUP)		MW-43D		MW-44S		MW-44D		MW-44B		
	CT RSRs				12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/16/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013	12/20/2013		
	I/C VC	RES VC	SWPC	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL
1,1,1,2-Tetrachloroethane	50	12	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2,2-Tetrachloroethane	100	23	110	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	2.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Tetrachloroethene	3820	1500	88	6.63	1	9.31	1	6.46	1	7.04	1	13.5	1	13	1	16.6	5	BRL	1	11.4	1	3.69	1	BRL	1	BRL	1
Toluene	50000	23500	4000000	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichlorobenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trichlorobenzene	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,1-Trichloroethane	50000	20400	62000	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2-Trichloroethane	19800	8000	1260	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Trichlorofluoromethane (Freon 11)	540	219	2340	10.5	1	17.3	1	21.6	1	10.3	1	BRL	1	4.17	1	4.07	1	38.6	5	BRL	1	19	1	7.92	1	BRL	1
Vinyl chloride	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
m,p-Xylene	2	2	15750	BRL	1	1.24	1	BRL	5	BRL	1	2.28	1	BRL	1	BRL	1	BRL	1								
Tetrahydrafuran	-	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	10	BRL	2	BRL	2	BRL	2	BRL	1	BRL	1
Ethyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tert-amyl methyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Ethyl tert-butyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Di-isopropyl ether	-	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	5	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tert-Butanol	-	-	-	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	20	BRL	10	BRL	10	BRL	20	BRL	10	BRL	20
1,4-Dioxane	-	-	-	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20	BRL	100	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20
trans-1,4-Dichloro-2-butene	-	-	-	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5	BRL	25	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5
Ethanol	-	-	-	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	2000	BRL	400	BRL	400	BRL	400	BRL	400

Notes

1. Groundwater criteria taken from Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 26, 2013.
2. SWPC = Surface Water Protection Criteria.
3. VC = Volatilization Criteria. (I/C = Industrial/Commercial; RES = Residential).
4. I/C indicates criteria established.
5. RD = Reportable Detection Limit.
6. BRL = Below Reporting Limit.
7. Blue indicates BRL above RSR criteria.
8. Red indicates concentration exceeds RSR criteria.
9. Chromium SWPC indicates hexavalent chromium.

TABLE 2-4

Groundwater Quality Data
Interior Wells
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Sampling Location			MW-30		MW-51D		MW-51B	
	CT RSRs			12/18/2013	RDL	12/18/2013	RDL	12/18/2013	RDL
	I/C VC	RES VC	SWPC	Result	Result	RDL	Result	RDL	
Indicator Parameters (mg/l)									
Chloride	-	-	-	540	40	185	11	236	13
Nitrate as N	-	-	-	97.2	4	19.5	1.1	10.8	1.3
Sulfate as SO ₄	-	-	-	BRL	1	BRL	0.1	BRL	0.1
Cyanide (total)	-	-	0.052	BRL	0.005	BRL	0.005	BRL	0.005
Ammonia as N	-	-	-	2.72	0.1	0.959	0.1	BRL	0.1
Total Organic Carbon	-	-	-	5.94	1	3.05	1	2.48	1
Total Dissolved Solids	-	-	-	2730	10	886	5	1370	5
Total Suspended Solids	-	-	-	BRL	5	BRL	5	BRL	5
Total Metals (mg/l)									
Arsenic	-	-	0.004	BRL	0.004	BRL	0.004	BRL	0.004
Barium	-	-	-	0.0087	0.005	0.0298	0.005	0.0498	0.005
Cadmium	-	-	0.006	BRL	0.0025	BRL	0.0025	BRL	0.0025
Chromium	-	-	0.11	BRL	0.005	BRL	0.005	BRL	0.005
Copper	-	-	0.048	0.006	0.005	0.0526	0.005	BRL	0.005
Iron	-	-	-	0.284	0.015	0.0161	0.015	0.0572	0.015
Manganese	-	-	-	0.255	0.002	1.11	0.002	0.0372	0.002
Sodium	-	-	-	76.4	0.25	95.1	5	19.5	5
Nickel	-	-	0.88	0.0084	0.005	0.0306	0.005	0.0314	0.005
Lead	-	-	0.013	BRL	0.0075	BRL	0.0075	BRL	0.0075
Zinc	-	-	0.123	0.0334	0.0075	BRL	0.0485	0.0552	0.0485
Volatile Organic Compounds (µg/l)									
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	-	-	BRL	25	BRL	1	BRL	1
Acetone	50000	50000	-	BRL	250	BRL	10	BRL	10
Acrylonitrile	-	-	20	BRL	12.5	BRL	0.5	BRL	0.5
Benzene	530	215	710	BRL	25	BRL	1	BRL	1
Bromobenzene	-	-	-	BRL	25	BRL	1	BRL	1
Bromochloromethane	-	-	-	BRL	25	BRL	1	BRL	1
Bromodichloromethane	-	-	-	BRL	12.5	BRL	0.5	BRL	0.5
Bromoform	3800	920	10800	BRL	25	BRL	1	BRL	1
Bromomethane	-	-	-	BRL	50	BRL	2	BRL	2
2-Butanone (MEK)	50000	50000	-	BRL	250	BRL	10	BRL	10
n-Butylbenzene	-	-	-	BRL	25	BRL	1	BRL	1
sec-Butylbenzene	-	-	-	BRL	25	BRL	1	BRL	1
tert-Butylbenzene	-	-	-	BRL	25	BRL	1	BRL	1
Carbon disulfide	-	-	-	BRL	50	BRL	2	BRL	2
Carbon tetrachloride	40	16	132	BRL	25	BRL	1	BRL	1
Chlorobenzene	6150	1800	420000	BRL	25	BRL	1	BRL	1
Chloroethane	-	-	-	BRL	50	BRL	2	BRL	2
Chloroform	710	287	14100	BRL	25	BRL	1	BRL	1
Chloromethane	-	-	-	BRL	50	BRL	2	BRL	2
2-Chlorotoluene	-	-	-	BRL	25	BRL	1	BRL	1
4-Chlorotoluene	-	-	-	BRL	25	BRL	1	BRL	1
1,2-Dibromo-3-chloropropane	-	-	-	BRL	50	BRL	2	BRL	2
Dibromochloromethane	-	-	-	BRL	12.5	BRL	0.5	BRL	0.5
1,2-Dibromoethane (EDB)	16	4	-	BRL	12.5	BRL	0.5	BRL	0.5
Dichlorodifluoromethane (Freon 12)	-	-	-	BRL	50	BRL	2	BRL	2
1,1-Dichloroethane	50000	34600	-	BRL	25	BRL	1	BRL	1
1,2-Dichloroethane	90	21	2970	BRL	25	BRL	1	BRL	1
1,1,1-Dichloroethane	6	1	96	BRL	25	BRL	1	BRL	1
cis-1,2-Dichloroethene	-	-	-	1030	25	84.7	5	81	5
trans-1,2-Dichloroethene	-	-	-	BRL	25	BRL	1	BRL	1
1,2-Dichloropropane	60	14	-	BRL	25	BRL	1	BRL	1
1,3-Dichloropropane	-	-	34000	BRL	25	BRL	1	BRL	1
2,2-Dichloropropane	-	-	-	BRL	25	BRL	1	BRL	1
1,1-Dichloropropene	-	-	-	BRL	25	BRL	1	BRL	1
cis-1,3-Dichloropropene	-	-	-	BRL	12.5	BRL	0.5	BRL	0.5
trans-1,3-Dichloropropene	-	-	-	BRL	12.5	BRL	0.5	BRL	0.5
Ethylbenzene	50000	50000	580000	BRL	25	BRL	1	BRL	1
Hexachlorobutadiene	-	-	-	BRL	12.5	BRL	0.5	BRL	0.5
2-Hexanone (MBK)	-	-	-	BRL	250	BRL	10	BRL	10
Isopropylbenzene	-	-	-	BRL	25	BRL	1	BRL	1
4-Isopropyltoluene	-	-	-	BRL	25	BRL	1	BRL	1
Methyl tert-butyl ether	50000	50000	-	BRL	250	BRL	10	BRL	10
4-Methyl-2-pentanone (MIBK)	50000	50000	-	BRL	25	BRL	1	BRL	1
Methylene chloride	50000	50000	48000	BRL	50	BRL	2	BRL	2
Naphthalene	-	-	-	BRL	25	BRL	1	BRL	1
n-Propylbenzene	-	-	-	BRL	25	BRL	1	BRL	1
Syrene	2065	580	-	BRL	25	BRL	1	BRL	1
1,1,1,2-Tetrachloroethane	50	12	-	BRL	25	31.6	5	2.69	1
1,1,2,2-Tetrachloroethane	100	23	110	BRL	12.5	BRL	0.5	BRL	0.5
Tetrachloroethene	3820	1500	88	BRL	25	BRL	5	BRL	1
Toluene	50000	23500	4000000	BRL	25	BRL	5	BRL	1
1,2,3-Trichlorobenzene	-	-	-	BRL	25	BRL	5	BRL	1
1,2,4-Trichlorobenzene	-	-	-	BRL	25	BRL	5	BRL	1
1,1,1-Trichloroethane	50000	20400	62000	BRL	25	BRL	5	BRL	1
1,1,2-Trichloroethane	19600	8000	1260	BRL	25	BRL	5	BRL	1
Trichloroethene	540	219	2340	319	25	55.5	5	19.2	5
Trichlorofluoromethane (Freon 11)	-	-	-	BRL	25	BRL	5	BRL	5
1,2,3-Trichloropropane	-	-	-	BRL	25	BRL	5	BRL	5
1,2,4-Trimethylbenzene	-	-	-	BRL	25	BRL	5	BRL	5
1,3,5-Trimethylbenzene	-	-	-	BRL	25	BRL	5	BRL	5
Vinyl chloride	2	2	15750	106	25	4.41	1	BRL	1
m,p-Xylene	50000	21300	-	BRL	50	BRL	10	BRL	10
o-Xylene	-	-	-	BRL	25	BRL	5	BRL	5
Tetrahydrofuran	-	-	-	BRL	50	BRL	10	BRL	10
Ethyl ether	-	-	-	BRL	25	BRL	5	BRL	5
Tert-amyl methyl ether	-	-	-	BRL	25	BRL	5	BRL	5
Ethyl tert-butyl ether	-	-	-	BRL	25	BRL	5	BRL	5
Di-isopropyl ether	-	-	-	BRL	25	BRL	5	BRL	5
Tert-Butanol / butyl alcohol	-	-	-	BRL	250	BRL	50	BRL	50
1,4-Dioxane	-	-	-	BRL	500	BRL	100	BRL	100
trans-1,4-Dichloro-2-butene	-	-	-	BRL	125	BRL	25	BRL	25
Ethanol	-	-	-	BRL	10000	BRL	2000	BRL	2000

Notes

1. Groundwater criteria taken from Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 26, 2013.
2. VC = Volatilization Criteria. (I/C = Industrial/Commercial; RES = Residential)
3. - indicates RSR standard not established.
4. RDL = Reportable Detection Limit
5. BRL = Below Reporting Limit
6. Blue indicates RDL above RSR criteria.
7. Red indicates concentration exceeds RSR criteria.
8. Chromium SWPC indicates hexavalent chromium.

TABLE 2-5

**Groundwater Quality Data
GA Area Wells, West of Branch Brook
December 2013**

**Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT**

Analytes (concentration)	Sampling Location				MW-36		MW-37D		MW-37B	
	CT RSRs				Result	RDL	Result	RDL	Result	RDL
	GWPC	I/C VC	RES VC	SWPC	12/23/2013	12/23/2013	12/23/2013	12/23/2013	12/23/2013	12/23/2013
Indicator Parameters (mg/l)										
Chloride	-	-	-	-	60.5	2	67.1	3	54.5	2
Nitrate as N	-	-	-	-	0.45	0.1	0.922	0.1	0.462	0.1
Nitrite as N	-	-	-	-	BRL	0.1	BRL	0.1	BRL	0.1
Sulfate as SO ₄	-	-	-	-	30.8	1	31.1	1	39.7	1
Cyanide (total)	0.2	-	-	-	0.052	BRL	0.005	BRL	0.005	BRL
Ammmonium as N	-	-	-	-	BRL	0.1	BRL	0.1	BRL	0.1
Total Organic Carbon	-	-	-	-	BRL	1	BRL	1	BRL	1
Total Dissolved Solids	-	-	-	-	158	5	172	5	205	5
Total Suspended Solids	-	-	-	-	6	5	BRL	5	BRL	5
Total Metals (mg/l)										
Arsenic	0.05	-	-	-	0.004	BRL	0.004	BRL	0.004	BRL
Barium	1	-	-	-	0.049	0.008	0.0532	0.005	0.0734	0.005
Cadmium	0.005	-	-	-	0.006	BRL	0.0025	BRL	0.0025	BRL
Chromium	0.05	-	-	-	0.11	BRL	0.005	BRL	0.005	BRL
Copper	1.3	-	-	-	0.048	BRL	0.005	BRL	0.005	BRL
Iron	-	-	-	-	0.0563	0.015	0.016	0.015	0.0178	0.015
Manganese	-	-	-	-	BRL	0.0043	BRL	0.0043	BRL	0.0043
Sodium	-	-	-	-	30.5	-	32.5	-	35.5	-
Nickel	0.1	-	-	-	0.88	BRL	0.005	BRL	0.005	BRL
Lead	0.015	-	-	-	0.013	BRL	0.0075	BRL	0.0075	BRL
Zinc	5	-	-	-	0.123	BRL	0.005	BRL	0.009	BRL
Volatile Organic Compounds (ug/l)										
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	-	-	-	BRL	1	BRL	1	BRL	1
Acetone	700	50000	50000	-	BRL	10	BRL	10	BRL	10
Acrylonitrile	0.5	-	-	20	BRL	0.5	BRL	0.5	BRL	0.5
Benzene	1	530	215	710	BRL	1	BRL	1	BRL	1
Bromobenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
Bromochloromethane	-	-	-	-	BRL	1	BRL	1	BRL	1
Bromodichloromethane	-	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5
Bromoform	4	3800	920	10800	BRL	1	BRL	1	BRL	1
Bromomethane	-	-	-	-	BRL	2	BRL	2	BRL	2
2-Butanone (MEK)	400	50000	50000	-	BRL	10	BRL	10	BRL	10
n-Butylbenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
sec-Butylbenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
tert-Butylbenzene	-	-	-	-	BRL	2	BRL	2	BRL	2
Carbon disulfide	-	-	-	-	BRL	1	BRL	1	BRL	1
Carbo-tetrachloride	5	40	16	132	BRL	1	BRL	1	BRL	1
Chlorobenzene	100	6150	1800	420000	BRL	1	BRL	1	BRL	1
Chloroethane	-	-	-	-	BRL	2	BRL	2	BRL	2
Chloroform	6	710	287	14100	BRL	1	BRL	1	BRL	1
Chloromethane	-	-	-	-	BRL	2	BRL	2	BRL	2
2-Chlorotoluene	-	-	-	-	BRL	1	BRL	1	BRL	1
4-Chlorotoluene	-	-	-	-	BRL	1	BRL	1	BRL	1
1,2-Dibromo-3-chloropropane	-	-	-	-	BRL	2	BRL	2	BRL	2
Dibromoethane	0.5	-	-	1020	BRL	0.5	BRL	0.5	BRL	0.5
1,2-Dibromoethane (EDB)	0.05	16	4	-	BRL	0.5	BRL	0.5	BRL	0.5
Dibromomethane	-	-	-	-	BRL	1	BRL	1	BRL	1
1,2-Dichlorobenzene	600	50000	30500	170000	BRL	1	BRL	1	BRL	1
1,3-Dichlorobenzene	600	50000	24200	26000	BRL	1	BRL	1	BRL	1
1,4-Dichlorobenzene	75	50000	50000	26000	BRL	1	BRL	1	BRL	1
Dichlorodifluoromethane (Freon 12)	-	-	-	-	BRL	2	BRL	2	BRL	2
Ethane	70	50000	34600	-	BRL	1	BRL	1	BRL	1
1,2-Dichloroethane	1	90	21	2970	BRL	1	BRL	1	BRL	1
1,1-Dichloroethene	7	6	1	96	BRL	1	BRL	1	BRL	1
cis-1,2-Dichloroethene	70	-	-	-	BRL	1	BRL	1	BRL	1
trans-1,2-Dichloroethene	100	-	-	-	BRL	1	BRL	1	BRL	1
1,2-Dichloropropane	5	60	14	-	BRL	1	BRL	1	BRL	1
1,3-Dichloropropane	-	-	-	34000	BRL	1	BRL	1	BRL	1
2,2-Dichloropropane	-	-	-	-	BRL	1	BRL	1	BRL	1
1,1-Dichloropropene	-	-	-	-	BRL	1	BRL	1	BRL	1
cis-1,3-Dichloropropene	-	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5
trans-1,3-Dichloropropene	-	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5
Ethylbenzene	700	50000	50000	580000	BRL	1	BRL	1	BRL	1
Heptachlorobutadiene	-	-	-	-	BRL	0.5	BRL	0.5	BRL	0.5
2-Hexanone (MBK)	-	-	-	-	BRL	10	BRL	10	BRL	10
Isopropylbenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
4-Isopropyltoluene	-	-	-	-	BRL	1	BRL	1	BRL	1
Methyl tert-butyl ether	100	50000	50000	-	BRL	1	BRL	1	BRL	1
4-Methyl-2-pentanone (MIBK)	350	50000	50000	48000	BRL	10	BRL	10	BRL	10
Methylene chloride	5	50000	50000	-	BRL	2	BRL	2	BRL	2
Naphthalene	280	-	-	-	BRL	1	BRL	1	BRL	1
n-Propylbenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
Styrene	100	2065	580	-	BRL	1	BRL	1	BRL	1
1,1,1,2-Tetrachloroethane	1	50	12	-	BRL	1	BRL	1	BRL	1
1,1,2,2-Tetrachloroethane	0.5	100	23	110	BRL	0.5	BRL	0.5	BRL	0.5
Tetrachloroethene	5	3820	1500	88	BRL	1	BRL	1	BRL	1
Toluene	1000	50000	23500	4000000	BRL	1	BRL	1	BRL	1
1,2,3-Trichlorobenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
1,2,4-Trichlorobenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
1,3,5-Trichlorobenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
1,1,1,2-Trichloroethane	200	50000	20400	62000	BRL	1	BRL	1	BRL	1
1,1,2,2-Trichloroethane	5	19600	8000	1260	BRL	1	BRL	1	BRL	1
Trichloroethene	5	540	219	2340	BRL	1	BRL	1	BRL	1
Trichlorotrifluoroethane (Freon 11)	-	-	-	-	BRL	1	BRL	1	BRL	1
1,2,2,2-Tetrachloropropane	-	-	-	-	BRL	1	BRL	1	BRL	1
1,2,4-Triisopropylbenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
1,3,5-Trimethylbenzene	-	-	-	-	BRL	1	BRL	1	BRL	1
Vinyl chloride	2	2	2	15750	BRL	1	BRL	1	BRL	1
m,p-Xylene	530	50000	21300	-	BRL	2	BRL	2	BRL	2
<i>o</i> -Xylene	-	-	-	-	BRL	1	BRL	1	BRL	1
Tetrahydrofuran	-	-	-	-	BRL	2	BRL	2	BRL	2
Ethyl ether	-	-	-	-	BRL	1	BRL	1	BRL	1
Tert-amyl methyl ether	-	-	-	-	BRL	1	BRL	1	BRL	1
Ethyl tert-butyl ether	-	-	-	-	BRL	1	BRL	1	BRL	1
Di-isopropyl ether	-	-	-	-	BRL	1	BRL	1	BRL	1
Tert-Butanol / butyl alcohol	-	-	-	-	BRL	10	BRL	10	BRL	10
1,4-Dioxane	-	-	-	-	BRL	20	BRL	20	BRL	20
trans-1,4-Dichloro-2-butene	-	-	-	-	BRL	5	BRL	5	BRL	5
Ethanol	-	-	-	-	BRL	400	BRL	400	BRL	400

Notes

1. Groundwater criteria taken from Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 26, 2013.
2. SWPC = Surface Water Protection Criteria.
3. VC = Volatilization Criteria (I/C = Industrial/Commercial; RES = Residential)
4. GWPC = Groundwater Protection Criteria.
5. - indicates RSR standard not established.
6. RDL = Reportable Detection Limit
7. BRL = Below Reporting Limit
8. Blue indicates RDL above RSR criteria.
9. Red indicates concentration exceeds RSR criteria.
10. Chromium SWPC indicates hexavalent chromium.

TABLE 2-6
STABILIZED AND/OR FINAL GEOCHEMICAL FIELD PARAMETERS
December 2013

Envirite Facility
Old Waterbury Rd, Thomaston, CT
ENVIRON Project No. 08-14218G2

Groundwater Monitoring Well	Screen Intervals (feet BGS)		December 2013							
	Top Depth	Bottom Depth	Flow Rate (mL/min)	Depth to Water (feet TOC)	pH (SU)	Temp. (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
MW-30	38.0	48.0	100	17.13	5.50	12.80	2989.0	1.19	106.1	0.33
MW-31S	17.0	27.0	200	16.75	6.24	14.80	967.0	0.09	-187.0	4.39
MW-31D	26.5	31.5	225	17.32	6.51	13.40	521.2	0.03	214.0	3.09
MW-31B	37.0	47.0	50	21.31	6.63	12.10	218.4	1.91	-102.0	0.00
MW-32S	14.0	24.0	175	15.57	5.78	11.50	529.0	3.50	87.0	0.00
MW-32D	24.5	39.5	150	15.61	5.86	11.20	760.0	3.51	235.2	0.41
MW-33	15.0	25.0	40	18.32	5.06	7.10	201.2	2.04	235.0	1.91
MW-36	21.5	31.5	200	6.20	6.40	10.70	314.6	5.45	235.1	3.16
MW-37D	27.0	32.0	200	5.00	6.04	10.40	330.5	7.17	241.9	3.20
MW-37B	55.7	65.7	100	5.13	6.67	9.70	350.5	3.24	236.2	3.81
MW-41S	10.0	20.0	150	12.02	5.75	12.40	351.0	1.18	120.2	1.90
MW-41D	17.0	32.0	150	11.53	6.28	11.90	536.0	0.02	257.6	1.03
MW-41B	45.0	55.0	150	19.20	7.06	11.60	812.0	1.92	18.5	1.32
MW-42S	22.5	32.5	150	18.96	6.14	11.20	764.0	2.03	200.9	0.86
MW-42B	65.0	75.0	50	21.98	7.44	10.60	596.4	0.30	28.4	0.68
MW-43S	22.5	32.5	200	18.40	5.87	11.90	1587.0	0.56	264.9	2.19
MW-43D	58.0	68.0	150	18.65	5.33	11.50	2154.0	0.18	264.7	2.44
MW-44S	17.0	27.0	200	16.58	6.56	9.60	151.3	7.60	124.2	0.00
MW-44D	62.0	72.0	200	17.14	5.93	10.00	966.0	0.61	109.1	0.00
MW-44B	75.0	85.0	100	19.06	4.67	9.00	357.5	1.60	103.5	0.00
MW-50S	13.7	18.7	150	13.08	5.92	13.10	1474.0	0.09	242.6	1.33
MW-51D	18.3	28.3	200	16.53	5.98	15.10	1143.0	0.67	158.4	0.12
MW-51B	38.5	48.5	50	18.85	6.82	12.20	1607.0	0.42	200.6	0.79
MW-53D	25.0	40.0	220	14.76	6.06	12.70	2230.0	1.39	42.2	2.21
MW-55B	15.0	25.0	65	16.03	6.11	11.40	212.4	3.91	204.1	2.90
MW-61S	14.0	20.0	150	15.96	5.96	11.50	287.0	3.95	74.5	16.50
MW-61D	42.0	52.0	200	16.25	5.87	11.20	556.0	3.61	95.5	0.00
MW-61B	59.0	69.0	50	18.14	7.26	10.30	603.1	5.63	268.4	1.02
MW-62	19.0	21.0	150	14.74	5.84	13.50	668.0	1.99	147.9	4.23
MW-62B	26.0	36.0	150	29.02	6.96	12.70	616.0	6.26	183.2	1.01
MW-63	14.5	24.5	200	17.57	5.88	11.40	604.0	4.38	148.9	2.95

- Notes:**
1. BGS refers to below ground surface.
 2. Well installation depths expressed in feet relative to ground surface.
 3. feet TOC indicates measurements are expressed in feet below the top of the steel well casing.

TABLE 3

Surface Water Quality Data
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentrations)	Sample Location		SW-NR-1		SW-NR-2		SW-NR-2 (DUP)		SW-BB-1		SW-BB-2	
	Freshwater Aquatic Life Criteria		12/30/2013		12/30/2013		12/30/2013		12/30/2013		12/30/2013	
	Acute	Chronic	Result	RDL	Result	RDL	Results	RDL	Result	RDL	Result	RDL
Total Metals (mg/l)												
Arsenic	0.34	0.15	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004	BRL	0.004
Barium	-	-	0.0198	0.005	0.0193	0.005	0.02	0.005	0.0126	0.005	0.0128	0.005
Cadmium	0.001	0.000125	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025	BRL	0.0025
Chromium	0.016	0.011	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005
Copper	0.0143	0.0048	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005
Iron	-	-	0.0935	0.015	0.107	0.015	0.11	0.015	0.182	0.015	0.156	0.015
Manganese	-	-	0.0291	0.002	0.0276	0.002	0.0284	0.002	0.0685	0.002	0.0764	0.002
Sodium	-	-	29.8	0.25	30.2	0.25	30.6	0.25	13	0.25	13.4	0.25
Nickel	0.2605	0.0289	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005	BRL	0.005
Lead	0.03	0.0012	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075	BRL	0.0075
Zinc	0.065	0.065	BRL	0.015	BRL	0.015	BRL	0.015	BRL	0.015	BRL	0.015
Volatile Organic Compounds (µg/l)												
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Acetone	-	-	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
Acrylonitrile	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Benzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Bromobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Bromoform	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Bromochloromethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Bromodichloromethane	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Bromine	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Bromomethane	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
2-Butanone (MEK)	-	-	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
n-Butylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
sec-Butylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
tert-Butylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Carbon disulfide	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Carbon tetrachloride	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Chlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Chloroethane	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Chloroform	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Chloromethane	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
2-Chlorotoluene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
4-Chlorotoluene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2-Dibromo-3-chloropropane	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Dibromochloromethane	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
1,2-Dibromoethane (EDB)	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Dibromomethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2-Dichlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3-Dichlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,4-Dichlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Dichlorodifluoromethane (Freon12)	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
1,1-Dichloroethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2-Dichloroethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1-Dichloroethene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
cis-1,2-Dichloroethene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
trans-1,2-Dichloroethene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2-Dichloropropene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3-Dichloropropene	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
trans-1,3-Dichloropropene	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Ethylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Hexachlorobutadiene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
2-Hexanone (MBK)	-	-	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
Isopropylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
4-Isopropyltoluene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Methyl tert-butyl ether	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
4-Methyl-2-pentanone (MIBK)	-	-	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
Methylene chloride	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Naphthalene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
n-Propylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Styrene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,1,2-Tetrachloroethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2,2-Tetrachloroethane	-	-	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Tetrachloroethene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Toluene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trichlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3,5-Trichlorobenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,1-Trichloroethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2-Trichloroethane	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Trichloroethene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Trichlorofluoromethane (Freon 11)	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichloropropene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trimethylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3,5-Trimethylbenzene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Vinyl chloride	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
m,p-Xylene	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
o-Xylene	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tetrahydrofuran	-	-	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Ethyl ether	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tert-amyl methyl ether	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Ethyl tert-butyl ether	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Di-isopropyl ether	-	-	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tert-Butanol / butyl alcohol	-	-	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
1,4-Dioxane	-	-	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20
trans-1,4-Dichloro-2-butene	-	-	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5
Ethanol	-	-	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400

Notes

- Groundwater criteria taken from Connecticut Remediation Standard Regulations (RSRs), Section 22a-133k-1 through 22a-133k-3, dated June 26, 2013.
- SWPC = Surface Water Protection Criteria.
- VC = Volatilization Criteria. (I/C = Industrial/Commercial; R = Residential)
- indicates RSR standard not established.
- RDL = Reportable Detection Limit
- BRL = Below Reporting Limit
- Blue indicates RDL above RSR criteria.
- Red indicates concentration exceeds RSR criteria.
- Chromium SWPC indicates hexavalent chromium.

TABLE 4

QA/QC Blank Sample Data
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Trip Blank		Trip Blank		Equipment Blank		Trip Blank		Trip Blank		Trip Blank		Equipment Blank		Trip Blank		Equipment Blank		
	12/16/2013		12/18/2013		12/18/2013		12/19/2013		12/20/2013		12/23/2013		12/23/2013		12/30/2013		12/30/2013		
	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	
Indicator Parameters (mg/l)																			
Chloride					BRL	1							BRL	1					
Nitrate as N					BRL	0.1							BRL	0.1					
Nitrite as N					BRL	0.1							BRL	0.1					
Sulfate as SO ₄					BRL	1							BRL	1					
Cyanide (total)					BRL	0.005							BRL	0.005					
Ammonia as N					BRL	0.1							BRL	0.1					
Total Organic Carbon					BRL	1							BRL	1					
Total Dissolved Solids					BRL	5							BRL	5					
Total Suspended Solids					BRL	5							BRL	7					
Total Metals (mg/l)																			
Arsenic					BRL	0.004							BRL	0.004				BRL	0.004
Barium					BRL	0.005							BRL	0.005				BRL	0.005
Cadmium					BRL	0.0025							BRL	0.0025				BRL	0.0025
Chromium					BRL	0.005							BRL	0.005				BRL	0.005
Copper					BRL	0.005							BRL	0.005				BRL	0.005
Iron					BRL	0.015							BRL	0.015				BRL	0.015
Manganese					BRL	0.002							BRL	0.002				BRL	0.002
Sodium					BRL	0.25							BRL	0.25				BRL	0.25
Nickel					BRL	0.005							BRL	0.005				BRL	0.005
Lead					BRL	0.0075							BRL	0.0075				BRL	0.0075
Zinc					BRL	0.0075							BRL	0.0075				BRL	0.0075
Volatile Organic Compounds (µg/l)																			
1,1,2-Trichlorotrifluoroethane (Freon 113)	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Acetone	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	
Acrylonitrile	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Benzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Bromobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Bromochloromethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Bromodichloromethane	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Bromoform	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Bromomethane	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	
2-Butanone (MEK)	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	
n-Butylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
sec-Butylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
tert-Butylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Carbon disulfide	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	
Carbon tetrachloride	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Chlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Chloroethane	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	
Chloroform	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Chloromethane	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	
2-Chlorotoluene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
4-Chlorotoluene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
1,2-Dibromo-3-chloropropane	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	
Dibromochloromethane	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
1,2-Dibromoethane (EDB)	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	
Dibromomethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
1,2-Dichlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
1,3-Dichlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
1,4-Dichlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	
Dichlorodifluoromethane (Freon12)	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	
1,1-Dichloroethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	

TABLE 4

QA/QC Blank Sample Data
December 2013

Envirite RCRA Landfill
Old Waterbury Road, Thomaston, CT

Analytes (concentration)	Trip Blank		Trip Blank		Equipment Blank		Trip Blank		Trip Blank		Equipment Blank		Trip Blank		Equipment Blank		Trip Blank	
	12/16/2013		12/18/2013		12/18/2013		12/19/2013		12/20/2013		12/23/2013		12/23/2013		12/30/2013		12/27/2013	
	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL	Result	RDL
1,2-Dichloroethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1-Dichloroethene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
cis-1,2-Dichloroethene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
trans-1,2-Dichloroethene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2-Dichloropropane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3-Dichloropropane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
2,2-Dichloropropane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1-Dichloropropene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
cis-1,3-Dichloropropene	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
trans-1,3-Dichloropropene	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Ethylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Hexachlorobutadiene	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
2-Hexanone (MBK)	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
Isopropylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
4-Isopropyltoluene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Methyl tert-butyl ether	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
4-Methyl-2-pentanone (MIBK)	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
Methylene chloride	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Naphthalene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
n-Propylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Styrene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,1,2-Tetrachloroethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2,2-Tetrachloroethane	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5	BRL	0.5
Tetrachloroethene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Toluene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trichlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3,5-Trichlorobenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,1-Trichloroethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,1,2-Trichloroethane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Trichloroethene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Trichlorofluoromethane (Freon 11)	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,3-Trichloropropane	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,2,4-Trimethylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
1,3,5-Trimethylbenzene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Vinyl chloride	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
m,p-Xylene	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
o-Xylene	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tetrahydrofuran	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2	BRL	2
Ethyl ether	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tert-amyl methyl ether	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Ethyl tert-butyl ether	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Di-isopropyl ether	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1	BRL	1
Tert-Butanol / butyl alcohol	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10	BRL	10
1,4-Dioxane	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20	BRL	20
trans-1,4-Dichloro-2-butene	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5	BRL	5
Ethanol	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400	BRL	400

Notes

1. RDL = Reportable Detection Limit
2. BRL = Below Reporting Limit

Appendix A

Low-Flow Groundwater Sampling Field Forms and Equipment Calibration Logs

Thomaston, Envirite

12/16/13

0715 on site.

Site has been plowed. ~4-5" of snow cover.

Clear skies, cold, 27°F.

Luke Chmielecki and John Underwood reviewed HASP.

Equipment calibrated by U.S. Environmental.

Beginning at MW-62 and MW-62B.

1000 both wells sampled. Decontamination of pumps with Alconox and D.I. Water. Replace bladders.

Mobilizing to MW-41 cluster.

1300 MW-41S and MW-41D sampled. Pumps deconned.

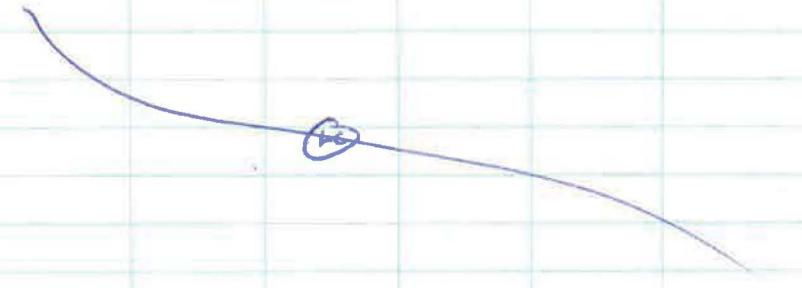
Mobilizing to MW-41B and MW-42S.

1500 Lab Courier on site for sample pick-up.

Deconned pumps.

Cleaned-up and organized bottles and equipment.

1545 off-site



~~LSe~~

Thomaston Envirite

12/18/13

0700 on site.

Calibrations performed prior to arriving on site.

Luke C and John U review HASP.

Beginning at MW-50S and MW-53D.

Moved to MW-51 cluster. Had to dig out (snow).

John U. moves to MW-30. Had to dig out (snow).

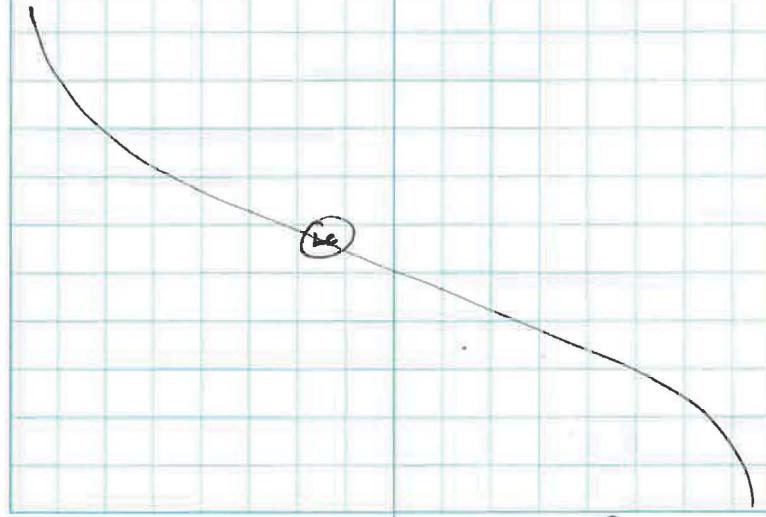
Luke C. moves to MW-42B.

1500 Spectrum courier arrives. 1530 offsite w/samples.

John U. continues to sample MW-30 and will submit with tomorrows samples. Micro bladder moving slow.

Freezing water lines and pumps made for a slow day.

1730 off-site.



~~LSe~~

Thomaston Envirite

12/19/13

0700 on site.

Calibrations performed prior to arriving on site.

John U and Luke C reviewed HASP.

Starting at MW-55B and MW-63.

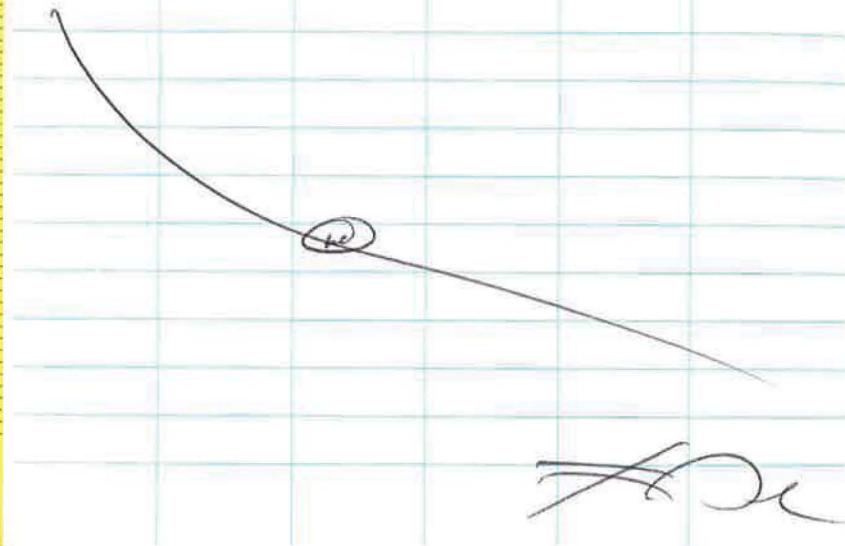
0930 John Noble on site.

1020 Set-up to monitor 32 cluster.

Finished Cluster 32 and moved to 61 cluster.

1230 John Noble and Bob Bracket (EPA) arrive at 61 cluster. 1250 John Noble and Bob B. leave 61 cluster and walk another part of the site. Luke moves to MW-33. Micro pump takes a long time to sample due to low flow rate.

Clean up and offsite 1730.



Thomaston Envirite

12/20/13

0800 on site.

Calibrations performed prior to arriving on site.

John U and Luke C reviewed HASP.

Starting at MW-44 and MW-43 clusters.

Obstruction in MW-44B.

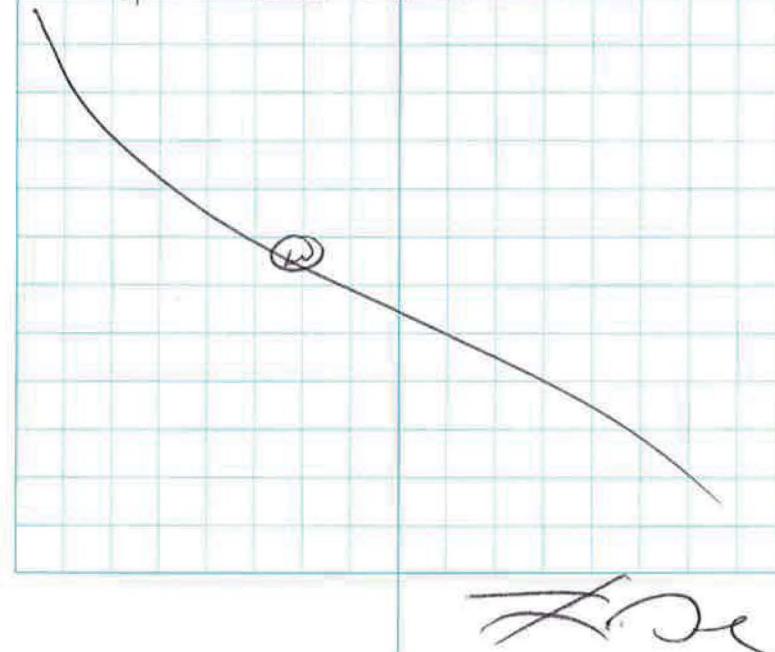
Not able to get bladder pump past obstruction.

Obstruction at ~~18.75'~~ 18.75'

Water Level Indicator can by-pass.

Installing micro bladder pump. Successful.

Luke moves to MW-31D.

1530 courier picks up samples.
clean-up and offsite 1700.

Thomaston Enviroite

12/23/13

0700 on site. Calibrations performed prior to arriving on site.
 Luke and John V. review HASP.
 Begin crossing Branch Brook several times with monitoring equipment.

Luke samples wells across Branch Brook. MW-36 and MW-37 cluster.

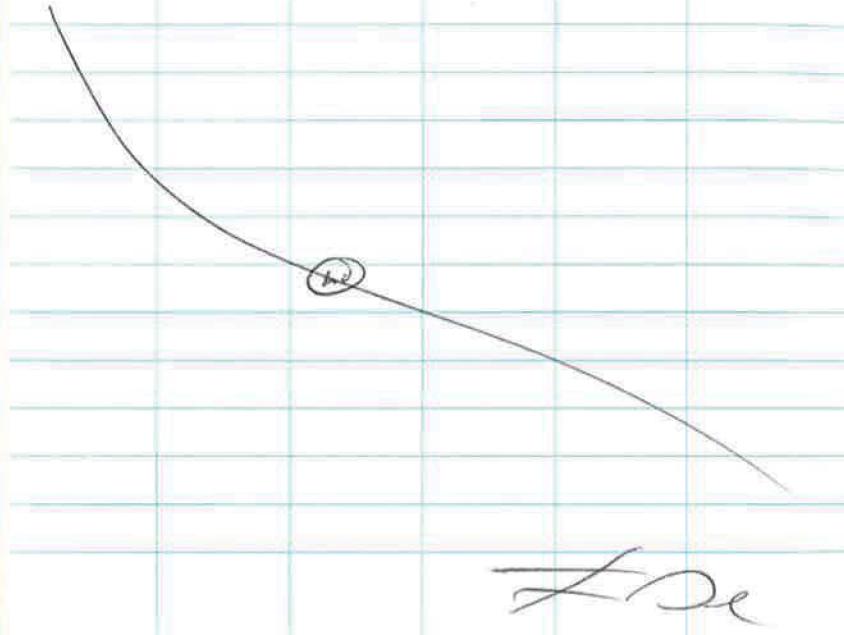
John V. samples MW-31B and MW-31S.

MW-31S requires a micro bladder pump and takes a long time to sample because of low flow rate.

Equipment is brought back across Branch Brook.

Courier on site 1530 for sample pick-up.

1600 cleanup and off-site.



Thomaston Enviroite

12/27/13

0900 Luke on site.

Reviewed HASP.

Inspected outfalls in Naugatuck River. Northernmost outfall not flowing. (stormwater).

Middle outfall only trickling. (stormwater). WPCF outfall half submerged like usual.

Call to John Noble.

John says to proceed with surfacewater sampling but to take southern (downstream) sample before (upstream of) middle outfall.

SW-NR-1 taken upstream of landfill in Naugatuck River.

SW-NR-2 taken just upstream of middle outfall in Naugatuck River.

No one in POTW office where check in usually happens. Decision made to not access property.

Luke crosses Branch Brook at MW-37 cluster. Walks to SW-BB-2. Downstream Branch Brook location on POTW side of Branch Brook at location of newly discovered well cluster by John Noble.

SW-BB-1 taken upstream at bend in brook. Clean-up and off-site. 1300





Low Flow Ground Water Sampling Field Log

Facility Name Envirote RCRA Landfill
03-1421862

Monitoring Well ID: MW-62B

Sampling Information

Date - 12/16/13
Personnel - Luke C.
Weather - 25° Clear Skies, Cold

Evacuation Equipment - Bladder Pump
Sample Equipment - Bladder Pump

Well / Ground Water Measurements

Depth to Water - 13.91 ft BG
Well Depth - 37.23 ft BG
Depth to Pump Intake - 31.00 ft BG
32.23 ft BG } From top of PVC.

Top of Casing Elevation - 40 ft MSL
Water table elevation - 40 ft MSL

Well Evacuation Data

Stabilization Criteria		± 0.1 SU	± 3 %	10%	± 3 %	± 10mV	10%	10%	Comments
Time	Rate mL/min	Vol. L	pH Std	Cond ms/cm	turb NTU	temp °C	ORP mV	DO mg/L	DTW ft
0855	150				60				13.91 Start
0900	150	.75	7.23	.618	2.06	12.7	187.2	4.51	17.45
0905	150	1.5	6.97	.616	1.51	12.9	184.5	5.33	23.33
0910	150	2.25	6.95	.617	1.84	12.8	184.5	6.20	26.41
0915	150	3.0	6.96	.617	1.89	12.7	183.9	6.23	27.79
0920	150	3.75	6.96	.616	1.81	12.7	183.2	6.26	28.02 Sampled
0920	SAMPLE	--	6.96	.616	1.01	12.7	183.2	6.26	29.02 Sampled
					Silica (kit)	NA	DO (Kit)	NA	Fe ²⁺ (Kit) NA

Notes / Sample Information

Sample Name - MW-62B/20131216

Appearance at start - clear
Appearance after purging - clear

Odor - none

DTW after purging - 29.02 ft bTOC
DTW at time of sampling - 29.02 ft bTOC

Total Volume Purged - 3.75 L Gallons
Purge Rate - 150 mL/min

Analyses - see COC

Sample Time - 0920

Notes / Other Observations - _____



Facility Name Envirite RCRA landfill
08-142862
08-1421862

Low Flow Ground Water Sampling Field Log

Monitoring Well ID: MW-62

Sampling Information

Date - 12-16-13
Personnel - J. Underwood
Weather - 25°F, Clear

Evacuation Equipment - Bladder Pump
Sample Equipment - Bladder Pump

Well / Ground Water Measurements

Depth to Water - 14.58 ft BG
Well Depth - 22.58 ft BG } From top
Depth to Pump Intake - 20.00 ft BG of PVC

Top of Casing Elevation - 0 ft MSL
Water table elevation - 0 ft MSL

Well Evacuation Data

Stabilization Criteria		± 0.1 SU	± 3 %	10%	± 3 %	± 10mV	10%	10%	Comments
Time	Rate mL/min	Vol. L	pH Std	Cond ms/cm	turb NTU	temp °C	ORP mV	DO mg/L	DTW ft
855	150	—	—	—	—	—	—	—	Purge start
910	150	2.25	5.96	0.685	15.2	13.5	142.5	3.75	14.70
915	150	3	5.89	0.685	13.1	13.5	147.1	2.98	14.71
920	150	3.75	5.85	0.685	9.91	13.5	146.9	2.48	14.72
925	150	4.5	5.86	0.672	5.86	13.3	146.6	2.24	14.73
930	150	5.25	5.85	0.670	4.93	13.4	145.5	2.16	14.73
935	150	6	5.83	0.670	4.51	13.4	147.0	1.99	14.73
940	150	6.75	5.84	0.668	4.23	13.5	147.9	1.99	14.74 Sample
940	SAMPLE	--	5.84	0.668	4.23	13.5	147.9	1.99	14.74 Sampled
					Silica (kit)	NA	DO (Kit)	NA	Fe ²⁺ (Kit) NA

Notes / Sample Information

Appearance at start - Brown/Turbid
Appearance after purging - Clear
DTW after purging - 14.74 ft bTOC
DTW at time of sampling - 14.74 ft bTOC
Analyses - See Chain of Custody

Sample Name - MW-62/20131216

Odor - None
Total Volume Purged - 6.75 Liters
Purge Rate - 150 Gallons
Sample Time - 940 mL/min

Notes / Other Observations -



Low Flow Ground Water Sampling Field Log

Facility Name Envirite RCRA Landfill
08-1421862

Monitoring Well ID: MW-41D

Sampling Information

Date - 12/16/13
Personnel - Luke C.
Weather - 25° Sunny, cold

Evacuation Equipment - Bladder Pump
Sample Equipment - Bladder Pump

Well / Ground Water Measurements

Depth to Water - 11.41 ft BG
Well Depth - 35.19 ft BG } From top of PVC.
Depth to Pump Intake - 27.69 ft BG

Top of Casing Elevation - 11.41 ft MSL
Water table elevation - 11.41 ft MSL

Well Evacuation Data

Time	Rate mL/min	Vol. L	± 0.1 SU		± 3 %		10% turb NTU	± 3 % temp °C	± 10 mV ORP mV	10% DO mg/l.	10% DTW ft	Comments
			pH Std	Cond ms/cm								
1130	150	--					6.0	11.9	257.5	0.21	11.53	Start
1135	150	.75	6.56	.538	1.56	11.9	254.4	0.08	254.0	0.06	11.53	
1140	150	1.5	6.37	.539	1.22	11.9	255.9	0.04	257.6	0.02	11.53	
1145	150	2.25	6.29	.538	1.17	11.9	257.6	0.02	257.6	0.02	11.53	
1150	150	3	6.27	.536	1.11	11.9	257.6	0.02	257.6	0.02	11.53	
1155	150	3.75	6.28	.536	1.08	11.9	257.6	0.02	257.6	0.02	11.53	Sampled
1155	SAMPLE	--	6.28	.536	1.03	11.9	257.6	0.02	257.6	0.02	11.53	Sampled
						Silica (kit)	NA	DO (Kit)	NA	Fe ²⁺ (Kit)	NA	

Notes / Sample Information

Appearance at start - clear
Appearance after purging - clear
DTW after purging - 11.53 ft bTOC
DTW at time of sampling - 11.53 ft bTOC
Analyses - See col

Sample Name - MW-41D/20131216

Odor - none
Total Volume Purged - 3.75 L Gallons
Purge Rate - 150 mL/min
Sample Time - 1155

Notes / Other Observations -



Low Flow Ground Water Sampling Field Log

Facility Name Enviroite RCRA landfill

08-142062
08-1421862

Sampling Information

Date - 12/16/13
 Personnel - J. Undenwal
 Weather - 25°F Clear

Monitoring Well ID: MW-41S

Evacuation Equipment - Bladder Pump
 Sample Equipment - Bladder Pump

Well / Ground Water Measurements

Depth to Water - 12.02 ft BG *from top of PVC pipe*
 Well Depth - 22.00 ft BG
 Depth to Pump Intake - 15.00 ft BG

Top of Casing Elevation - 17 ft MSL
 Water table elevation - 17 ft MSL

Well Evacuation Data

Stabilization Criteria		± 0.1 SU	± 3 %	10%	± 3 %	± 10mV	10%	10%		
Time	Rate mL/min	Vol. L	pH Std	Cond ms/cm	turb NTU	temp C	ORP mV	DO mg/L	DTW ft	Comments
1135	150	0	—	—	—	(90)	—	—	—	Purge Start
1140	150	0.750	6.02	0.351	4.72	12.8	126.4	4.50	12.02	
1145	150	1.5	5.83	0.350	4.80	12.4	124.9	2.10	12.02	
1150	150	2.25	5.83	0.350	4.47	12.5	123.5	1.50	12.02	
1155	150	3	5.79	0.351	4.42	12.5	120.2	1.26	12.02	
1205	150	4.5	5.73	0.351	2.13	12.4	118.5	1.22	12.02	
1210	150	5.25	5.77	0.351	1.99	12.4	120.0	1.16	12.02	
1215	150	6	5.75	0.351	1.90	12.4	120.2	1.14	12.02	Sampled
<i>John W. Weller</i>										
1215	SAMPLE	--	5.75	0.351	1.90	12.4	120.2	1.18	12.02	Sampled
				Silica (kit)	NA	DO (Kit)	NA	Fe ²⁺ (Kit)	NA	

Notes / Sample Information

Appearance at start - Clear
 Appearance after purging - Clear
 DTW after purging - 12.02 ft bTOC
 DTW at time of sampling - 12.02 ft bTOC
 Analyses - See Chain of Custody

Sample Name - MW-41S/20131216

Odor - None
 Total Volume Purged - 6 Liters
 Purge Rate - 150 Gallons
 Sample Time - 125:00 mL/min
1325

Notes / Other Observations -



Low Flow Ground Water Sampling Field Log

Facility Name Envirite RCRA Landf. II

08-14218 G2

Sampling Information

Date - 12/16/13
Personnel - Luke C.
Weather - 25° Sunny, Cold

Monitoring Well ID: Mw-42 S

Evacuation Equipment - Bladder Pump
Sample Equipment - Bladder Pump

Well / Ground Water Measurements

Depth to Water - 18.95 ft BG
Well Depth - 35.28 ft BG
Depth to Pump Intake - 30.28 ft BG } From top of PVC.

Top of Casing Elevation - 46 ft MSL
Water table elevation - 46 ft MSL

Well Evacuation Data

Time	Rate mL/min	Vol. L	± 0.1 SU	± 3 %	10%	± 3 %	± 10mV	10%	10%	Comments
			pH Std	Cond ms/cm	turb NTU	temp C	ORP mV	DO mg/L	DTW ft	
1320	150					④			18.95	Start
1325	150	.75	6.25	.712	5.54	10.8	144.6	2.60	18.96	
1330	150	1.5	6.20	.756	5.02	11.0	147.9	2.44	18.96	
1335	150	2.25	6.14	.762	1.06	11.3	149.8	2.16	18.96	
1340	150	3	6.13	.763	0.92	11.2	200.4	2.10	18.96	
1345	150	3.75	6.14	.764	0.86	11.2	200.4	2.08	18.96	Sampled
1345	SAMPLE	--	6.14	.764	0.86	11.2	200.4	2.08	18.96	Sampled
						Silica (kit)	NA	DO (Kit)	NA	Fe ²⁺ (Kit) NA

Notes / Sample Information

Appearance at start - clear
Appearance after purging - clear
DTW after purging - 18.96 ft bTOC
DTW at time of sampling - 18.96 ft bTOC
Analyses - see loc.

Sample Name - Mw-42 S/20131216

Odor - none
Total Volume Purged - 3.75 L Gallons
Purge Rate - 150 mL/min
Sample Time - 1345

Notes / Other Observations - _____



Low Flow Ground Water Sampling Field Log

Facility Name Envrite RCRA landfill
 DB-142862 (b)
 08-1421862

Monitoring Well ID: MW-41B

Sampling Information

Date - 12-16-13
 Personnel - J. Underwood
 Weather - 25°F Clear

Evacuation Equipment - Bladder Pump
 Sample Equipment - Bladder Pump

Well / Ground Water Measurements

Depth to Water - 10.34 ft BG
 Well Depth - 46.02 ft BG
 Depth to Pump Intake - 50.00 ft BG
 45.00 ft BG

Top of Casing Elevation - 94 ft MSL
 Water table elevation - 7 ft MSL

Well Evacuation Data

Stabilization Criteria		± 0.1 SU	± 3 %	10%	± 3 %	± 10mV	10%	10%		
Time	Rate mL/min	Vol. L	pH Std	Cond ms/cm	turb NTU	temp C	ORP mV	DO mg/L	DTW ft	Comments
1305	150	0	—	—	—	—	—	—	—	Purge Start
1310	150	0.75	6.55	0.816	2.83	11.5	68.1	3.40	11.86	
1315	150	1.5	6.73	0.814	2.74	11.6	56.5	3.45	13.39	
1320	150	2.25	6.85	0.819	2.50	11.4	47.1	2.79	15.49	
1325	150	3	6.93	0.811	2.43	11.3	39.7	2.55	16.40	
1330	150	3.75	6.98	0.811	2.32	11.3	30.9	2.25	17.18	
1335	150	4.5	7.03	0.811	1.64	11.4	25.4	2.10	17.93	
1340	150	5.25	7.04	0.811	1.55	11.4	23.7	1.99	18.35	
1345	150	6	7.06	0.812	1.32	11.6	18.5	1.92	19.20	stable
1350	SAMPLE	--	7.06	0.812	1.32	11.6	18.5	1.92	19.2	Sampled
				Silica (kit)	NA	DO (Kit)	NA	Fe ²⁺ (Kit)	NA	

Notes / Sample Information

Sample Name - MW-41B/20131216

Appearance at start - clear
 Appearance after purging - clear
 DTW after purging - 19.2 ft bTOC
 DTW at time of sampling - 19.2 ft bTOC

Odor - None

Total Volume Purged - 6 Liters
 Purge Rate - 150 Gallons
 mL/min

Analyses - See Chain of Custody

Sample Time - 1350

Notes / Other Observations -

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-14218 G2
 Date: 12/18/13
 Weather: 25°F Sunny

Well ID: MW-50S
 Sample ID: MW-50S/20131218
 Sampler: Luke Chmielecki
 Signature: Luke

Well Condition Observations	
Protective Casing:	<u>Good</u>
Lock:	<u>Good</u>
Label:	<u>Good</u>
Surface Seal:	<u>Good</u>
PVC Well Casing:	<u>Good</u>

Well Volume Calculations	
Well Diameter (in.):	<u>2"</u>
Depth to Water (ft.):	<u>13.08</u>
Total Depth (ft.):	<u>19.73</u>
Well Volume (gal.):	<u>1.08</u>

Pump Start: 0800

Time	Throttle SETTING (Feet H ₂ O)	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (μS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (Liters or gallons)
0805	<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>13.08</u>	<u>6.05</u>	<u>12.4</u>	<u>1511</u>	<u>0.51</u>	<u>248.2</u>	<u>2.16</u>	<u>.5</u>
0810	<u>10/5</u>	<u>4</u>	<u>37.5</u>	<u>150</u>	<u>13.08</u>	<u>5.96</u>	<u>12.8</u>	<u>1482</u>	<u>0.27</u>	<u>247.9</u>	<u>1.89</u>	<u>1.25</u>
0815	<u>10/5</u>	<u>4</u>	<u>37.5</u>	<u>150</u>	<u>13.08</u>	<u>5.94</u>	<u>13.2</u>	<u>1459</u>	<u>0.16</u>	<u>246.1</u>	<u>1.66</u>	<u>2</u>
0820	<u>10/5</u>	<u>4</u>	<u>35</u>	<u>140</u>	<u>13.08</u>	<u>5.92</u>	<u>13.1</u>	<u>1475</u>	<u>0.10</u>	<u>243.5</u>	<u>1.41</u>	<u>2.7</u>
0825	<u>10/5</u>	<u>4</u>	<u>37.5</u>	<u>150</u>	<u>13.08</u>	<u>5.92</u>	<u>13.0</u>	<u>1469</u>	<u>0.09</u>	<u>242.9</u>	<u>1.36</u>	<u>3.45</u>
0830	<u>10/5</u>	<u>4</u>	<u>37.5</u>	<u>150</u>	<u>13.08</u>	<u>5.92</u>	<u>13.1</u>	<u>+4.71</u>	<u>0.09</u>	<u>242.6</u>	<u>1.33</u>	<u>4.2</u>
								<u>+4.71</u>	<u>1474</u>			
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU	
Stabilization Achieved (Y/N)				<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	

Sampling/Purging Equipment	
Water Level Meter:	<u>Solis</u>
pH/S C/Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>La Motte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>17.25</u>
Tubing:	<u>1/4" Poly</u>

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			<u>See COC</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

SAMPLE COLLECTION TIME	START	END
	<u>0830</u>	<u>+4.71</u>

Comments: Total Purge Volume = 4.2 Liters

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thermalite
 Project No.: CB-1421B62
 Date: 12/14/13
 Weather: 20°F, clear

Well ID: MW-53D
 Sample ID: MW-53D/2013/218
 Sampler: J. Underhill
 Signature: [Signature]

Well Condition Observations									
Protective Casing:	good								
Lock:									
Label:									
Surface Seal:									
PVC Well Casing:									

Well Volume Calculations	
Well Diameter (in.):	2
Depth to Water (ft.):	14.74
Total Depth (ft.):	41.55
Well Volume (gal.):	4,37

Pump Start: 9:45

Time	Throttle SETTING (Feet H ₂ O)	Time Reflg/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SDI)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
750		10/5	4	40	160	14.74	6.40	11.2	1,863	28.50	14.0	12.8	0.8
800		10/5	4	50	200	14.74	6.15	11.5	2,039	5.07	18.4	13.8	2.8
810		10/5	4	50	200	14.76	6.09	12.6	2,192	2.11	25.5	9.67	3.8
820		10/5	4	50	200	14.76	6.06	12.6	2,118	1.76	32.3	5.17	3.9
825		10/5	4	50	200	14.76	6.07	12.7	2,223	1.69	35.9	4.57	4.3
830		10/5	4	55	220	14.76	6.00	12.5	2,224	1.52	37.4	2.44	8.9
835		10/5	4	55	220	14.76	6.00	12.7	2,231	1.39	39.5	2.32	9.95
840		10/5	4	55	220	14.76	6.00	12.7	2,230	1.39	42.2	2.21	11.05
<hr/>													
<i>John W. Haward</i>													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	\pm 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	\pm 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	Sola 54
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	Lamotte
Pump:	Bladder
Intake Depth (feet below PVC):	3ft 05"
Tubing:	1/4" Poly

Laboratory Analytes/Containers			
Container	Preservative	#	Analysis
See Chain of Custody			

SAMPLE COLLECTION TIME	START	END
	350	915

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 11.05 L

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12/18/13
 Weather: 25°F Sunny

Well ID: MW-51B
 Sample ID: MW-51B/20131218
 Sampler: Luke Chmielecki
 Signature: Luke

Well Condition Observations	
Protective Casing:	<u>Good</u>
Lock:	<u>Good (Road Box)</u>
Label:	<u>Good</u>
Surface Seal:	<u>Good</u>
PVC Well Casing:	<u>Good</u>

Well Volume Calculations	
Well Diameter (in.):	<u>2"</u>
Depth to Water (ft.):	<u>14.63</u>
Total Depth (ft.):	<u>47.81</u>
Well Volume (gal.):	<u>5.41</u>

Pump Start: 1100

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SD)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (Liters or gallons)
1105		10/5	4	25	100	15.70	6.74	13.4	1587	1.09	205.1	1.42	.5
1110		10/5	4	25	100	16.60	6.77	13.5	1595	0.65	201.1	1.10	1
1115		10/5	4	22.5	90	17.75	6.80	13.6	1598	0.55	199.7	0.96	1.45
1120		10/5	4	17.5	70	18.55	6.81	12.5	1613	0.40	200.4	0.84	1.73
1125		10/5	4	12.5	50	18.70	6.82	12.3	1609	0.45	200.5	0.81	1.98
1130		10/5	4	12.5	50	18.85	6.82	12.2	1607	0.42	200.6	0.79	2.23
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings > 5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				N	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>43.5</u>
Tubing:	<u>1/4" Poly</u>

Laboratory Analysis/Containers			
Container	Preservative	#	Analysis
			See COC

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

SAMPLE COLLECTION TIME	START	END
	1130	<u>1130</u>

Comments: Total Purge Volume = 2.23 Liters

Had to drop flow rate below 100 because of drawdown.

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 38-1421Ecn2
 Date: 12-18-13
 Weather: 25°F, sunny

Well ID: MW-51D
 Sample ID: MW-51D/20131213
 Sampler: J. Underwood
 Signature: John Underwood

Well Condition Observations				
Protective Casing:	<u>good</u>			
Lock:	<u>(2) good (brilliant)</u>	N/A		
Label:	<u>good</u>			
Surface Seal:	<u>good</u>			
PVC Well Casing:	<u>good</u>			

Well Volume Calculations				
Well Diameter (in.):	2			
Depth to Water (ft.):	16.51			
Total Depth (ft.):	44.35 (H)	28.46		
Well Volume (gal.):	1.95			

Pump Start: 1040

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (ml)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH	TEMP (°C)	SPECIFIC CONDUCTANCE (μS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liter or gallons)
1045	10/5	4	1	2050	200	16.53	6.02	15.2	1103	2.97	181.5	0.08	10
1050	10/5	4	1	50	200	16.53	6.03	15.2	1142	2.47	179.0	0.31	2.0
1055	10/5	4	1	50	200	16.53	5.99	15.3	1160	2.21	177.0	0.26	3.0
1100	10/5	4	1	50	200	16.53	6.03	15.3	1179	1.48	180.0	0.25	4.0
1105	10/5	4	1	50	200	16.53	5.97	15.3	1149	1.31	185.2	0.21	5.0
1110	10/5	4	1	50	200	16.53	5.98	15.3	1152	1.07	171.5	0.19	6.0
1115	10/5	4	1	50	200	16.53	5.96	15.3	1150	0.90	158.5	0.15	7.0
1120	10/5	4	1	50	200	16.53	5.98	15.3	1149	0.78	161.5	0.13	8.0
1125	10/5	4	1	50	200	16.53	5.94	15.3	1146	0.70	160.0	0.13	9.0
1130	10/5	4	1	50	200	16.53	5.98	15.1	1143	0.67	158.4	0.12	10.0
<u>John Underwood</u>													
Stabilization Criteria				100 - 400 mL/min	Drawdown <0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment				
Water Level Meter:	<u>Relinst</u>			
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>			
Turbidity:	<u>LaMotte</u>			
Pump:	<u>Bladder</u>			
Intake Depth (feet below PVC):	<u>23.46</u>			
Tubing:	<u>7/4" Poly</u>			

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
<u>See Chain of Custody</u>			

SAMPLE COLLECTION TIME	START	END
1130	1150	

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 10.0 liters

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
Project No.: 08-14218 G2
Date: 12/18/13
Weather: 25°F Sunny

Well ID: MW-42B
Sample ID: MW-42B/20131218
Sampler: Luke Chmielecki
Signature: 

Well Condition Observations	
Protective Casing:	Good
Lock:	Good
Label:	Good
Surface Seal:	Good
PVC Well Casing:	Good

Well Volume Calculations	
Well Diameter (in.):	2"
Depth to Water (ft.):	17.85
Total Depth (ft.):	76.62
Well Volume (gal.):	9.59

Pump Start: 1345

Sampling/Pumping Equipment	
Water Level Meter:	Solinst
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	LaMotte
Pump:	Bladder
Intake Depth (feet below PVC):	71.60
Total Length (feet):	1000 ft.

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

	START	END
SAMPLE COLLECTION TIME	1420	

Commonly Used Units

Total Purge Volume = 7.8 Liters
Had to drop Flow rate below 100 because of drawdown.

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12-18-13
 Weather: 28°F, 25°F, sunny

Well ID: MW-30
 Sample ID: MW-30/20131218
 Sampler: JON WILKINSON
 Signature: John Wilkinson

Well Condition Observations				
Protective Casing:	<u>good</u>			
Lock:	<u>good</u>			
Label:	<u>N/A</u>			
Surface Seal:	<u>good</u>			
PVC Well Casing:	<u>good</u>			

Well Volume Calculations				
Well Diameter (in.):	<u>1.5</u>			
Depth to Water (ft.):	<u>17.13</u>			
Total Depth (ft.):	<u>44.77</u>			
Well Volume (gal.):	<u>254</u>			

Time	Throttle SETTING (Feet H ₂ O)	Time Refill Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP °C	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1335	10/5	4	25	100	17.01	5.54	12.0	28.0	3.12	135.0	3.72	0.5	
1340	10/5	4	25	100	17.09	5.57	12.7	28.1	1.76	127.3	4.88	1.0	
1345	10/5	4	25	100	17.13	5.47	13.0	28.2	1.43	119.5	4.69	1.5	
1350	10/5	4	25	100	17.13	5.44	12.9	28.2	1.40	116.5	2.88	2.0	
1355	10/5	4	25	100	17.13	5.45	12.9	28.1	1.38	109.8	3.14	2.5	
1405	10/5	4	25	100	17.13	5.41	12.9	28.0	1.29	106.5	2.22	3.5	
1410	10/5	4	25	100	17.13	5.39	12.9	28.0	1.30	107.0	2.16	4.0	
1415	10/5	4	25	100	17.13	5.43	12.9	30.22	1.21	105.0	2.07	4.5	
1420	10/5	4	25	100	17.13	5.49	12.9	29.83	1.25	105.78	2.05	5.0	
1430	10/5	4	25	100	17.13	5.50	12.9	29.89	1.19	106.1	0.33	3.5	
<u>John Wilkinson</u>													
Stabilization Criteria				100 - 400 mL/min	Drawdown <0.3'	+/- 0.1 mads	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Pumping Equipment				
Water Level Meter:	Solinst			
pH/S.C./Dissolved Oxygen/ORP:	YSI			
Turbidity:	LaMotte			
Pump:	Micro Bladder			
Intake Depth (feet below PVC):	41.5			
Tubing:	1/4" Poly			

Laboratory Analysis/Containers			
Container	Preservative	#	Analysis
See	Chloro of		Custody (gr)

Note: During well purging, monitor indicator field parameters (temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

SAMPLE COLLECTION TIME	START	END
1435	1515	

Comments: Total Purge Volume = 5.5 Liters

using micro bladder pump - pumping at max speed, took 15 minutes for water to first reach bucket. changed CO₂ tank @ 1428 when sampling, pump slowed to trickle



LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thimaston
 Project No.: 08-14218G2
 Date: 12/19/13
 Weather: 35°F Sunny

Well ID: MW-55B
 Sample ID: MW-55B/20131219
 Sampler: Luke Chmielecki
 Signature: Luke

Well Condition Observations				
Protective Casing:	<u>Good</u>			
Lock:				
Label:	<u>LC</u>			
Surface Seal:				
PVC Well Casing:	<u>↓</u>			

Well Volume Calculations			
Well Diameter (in.):	<u>2"</u>		
Depth to Water (ft.):	<u>16.03</u>		
Total Depth (ft.):	<u>26.02</u>		
Well Volume (gal.):	<u>1.63</u>		

Pump Start: 0810

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (Liters or gallons)
0815	<u>10/5</u>	<u>4</u>	<u>12.5</u>	<u>50</u>	<u>16.03</u>	<u>6.56</u>	<u>10.6</u>	<u>216.4</u>	<u>3.85</u>	<u>201.6</u>	<u>5.15</u>	<u>.25</u>	
0820	<u>10/5</u>	<u>4</u>	<u>15</u>	<u>60</u>	<u>16.03</u>	<u>6.31</u>	<u>10.8</u>	<u>215.7</u>	<u>3.90</u>	<u>202.1</u>	<u>4.62</u>	<u>.55</u>	
0825	<u>10/5</u>	<u>4</u>	<u>15</u>	<u>60</u>	<u>16.03</u>	<u>6.23</u>	<u>11.1</u>	<u>214.2</u>	<u>3.87</u>	<u>202.9</u>	<u>3.68</u>	<u>.85</u>	
0830	<u>10/5</u>	<u>4</u>	<u>15</u>	<u>60</u>	<u>16.03</u>	<u>6.19</u>	<u>11.2</u>	<u>213.0</u>	<u>3.88</u>	<u>203.2</u>	<u>3.12</u>	<u>1.15</u>	
0835	<u>10/5</u>	<u>4</u>	<u>16.25</u>	<u>65</u>	<u>16.03</u>	<u>6.13</u>	<u>11.4</u>	<u>212.9</u>	<u>3.89</u>	<u>203.7</u>	<u>2.98</u>	<u>1.48</u>	
0840	<u>10/5</u>	<u>4</u>	<u>16.25</u>	<u>65</u>	<u>16.03</u>	<u>6.11</u>	<u>11.4</u>	<u>212.4</u>	<u>3.91</u>	<u>204.1</u>	<u>2.90</u>	<u>1.8</u>	
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 min	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				N	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>+6-00(6) 21.00</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			See COC

SAMPLE COLLECTION TIME	START	END
	<u>0840</u>	<u>-</u>

Comments: Total Purge Volume = 1.8 Liters

Pumped at low flow rate because bedrock wells on site drawdown quickly.

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-14218612
 Date: 12-19-13
 Weather: 34° Clear

Well ID: MW-63
 Sample ID: MW-63/20131219
 Sampler: J. Underwood
 Signature: John W Underwood

Well Condition Observations	
Protective Casing:	<u>graff</u>
Lock:	<u>✓</u>
Label:	<u>✓</u>
Surface Seal:	<u>✓</u>
PVC Well Casing:	<u>✓</u>

Well Volume Calculations	
Well Diameter (in.):	<u>2</u>
Depth to Water (ft.):	<u>17.19</u>
Total Depth (ft.):	<u>26.30</u>
Well Volume (gal.):	<u>149</u>

Time	Throttle SETTING (Port H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (μS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)		
													Pump Start:	745	
810	10/5	4	50	200	17.57	6.01	11.0	599	25.69	162.4	23.4	1.0			
815	10/5	4	50	200	17.60	5.94	11.3	602	14.46	162.2	19.8	2.0			
820	10/5	4	50	200	17.57	5.92	11.3	601	9.39	163.1	16.1	3.0			
825	10/5	4	50	200	17.57	5.90	11.3	603	7.83	163.7	9.22	4.0			
830	10/5	4	50	200	17.57	5.90	11.4	603	6.76	163.0	7.63	5.0			
835	10/5	4	50	200	17.57	5.89	11.4	603	5.83	160.7	7.63	6.0			
840	10/5	4	50	200	17.57	5.87	11.4	605	5.03	157.1	4.91	7.0			
845	10/5	4	50	200	17.57	5.89	11.4	603	4.44	153.7	3.34	8.0			
850	10/5	4	50	200	17.57	5.88	11.4	604	4.24	150.7	3.07	9.00			
855	10/5	4	50	200	17.57	5.88	11.4	604	4.38	149.9	2.45	10.0			
<i>John W Underwood</i>															
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3"	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU				
Stabilization Achieved (Y/N)				Y	Y	Y	X	X	Y	Y	Y				

Sampling/Purging Equipment	
Water Level Meter:	Solinst
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	LAMOTTE
Pump:	Bladder
Intake Depth (feet below PVC):	21.30
Tubing:	1/4" PTFE

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
See Chain of Custody			

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/s/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 12.0L / 2 liters purged during sampling

Issue with unit leaking after problem was ice in tubing creating an over pressurized system. Issue resolved

SAMPLE COLLECTION TIME	START	END
	700	925

 ENVIRO

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
Project No.: 08/1421862
Date: 12/19/13
Weather: 35°F Sunny

Well ID: MW-32 D
Sample ID: MW-32D/20131219
Sampler: Luke Chmielecki
Signature: 

Well Condition Observations	
Protective Casing:	Good
Lock:	↓
Label:	40
Surface Seal:	↓
PVC Well Casing:	

Well Volume Calculations	
Well Diameter (in.):	7"
Depth to Water (ft.):	15.60
Total Depth (ft.):	41.00
Well Volume (gal.):	4.14

Sampling/Purging Equipment	
Water Level Meter:	Solinst
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	LaMotte
Pump:	Bladder
Intake Depth (feet below PVC):	33.5
Tubing:	1/4" Poly

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 50 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

	START	END
SAMPLE COLLECTION TIME	11:00	

Comments: Total Purge Volume = 5.18 liters

ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12-14-13
 Weather: 35°F, sunny

Well ID: MW-325
 Sample ID: MW-325/20131213
 Sampler: T. Underwood
 Signature: John W. Underwood

Well Condition Observations									
Protective Casing:	good								
Lock:	good								
Label:	0	bit good							
Surface Seal:	good								
PVC Well Casing:	good								

Well Volume Calculations			
Well Diameter (in.):	2		
Depth to Water (ft.):	15.53		
Total Depth (ft.):	27.51		
Well Volume (gal.):	1.95		

Pump Start: 1020

Time	Throttle SETTING (feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min.)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1025		10/5	4	50	200	15.57	5.84	11.5	706	11.25	134.1	1.52	1.0
1030		10/5	4	50	200	15.57	5.78	11.4	529	5.43	112.1	1.37	2.0
1035		10/5	4	50	200	15.57	5.77	11.5	531	4.79	105.3	1.77	0.0
1040		10/5	4	37.5	150	15.57	5.72	11.5	530	4.01	97.8	0.0	0.0
1045		10/5	4	37.5	150	15.57	5.77	11.6	542	3.62	90.9	0.0	4.5
1050		10/5	4	37.5	150	15.57	5.77	11.5	530	3.64	83.1	0.0	5.25
1055		10/5	4	37.5	150	15.57	5.78	11.5	529	3.50	87.0	0.0	0.0
<hr/>													
<i>John W. Underwood</i>													
<hr/>													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	± 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	± 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	Solinst
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	LaMotte
Pump:	Bladder
Intake Depth (feet below PVC):	22.5'
Tubing:	1/4" Poly

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
See Chain of Custody			

SAMPLE COLLECTION TIME	START	END
	1100	1125

Comments: Total Purge Volume = 7 L

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12/19/13
 Weather: 35°F Sunny

Well ID: MW-618
 Sample ID: MW-618/20131219
 Sampler: Luke Chmieleck
 Signature: LAC

Well Condition Observations		
Protective Casing:	<u>Good</u>	
Lock:	<u>OK</u>	
Label:		
Surface Seal:		
PVC Well Casing:		

Well Volume Calculations		
Well Diameter (in.):	<u>2"</u>	
Depth to Water (ft.):	<u>14.63</u>	
Total Depth (ft.):	<u>70.34</u>	
Well Volume (gal.):	<u>9.09</u>	

Time	Throttle SETTING (Feet H ₂ O)	Time Refl/R Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (μS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters/gallons)										
													1230	1235	1240	1245	1250	1255	1300	1305			
1230	/	10/5	4	13.75	55	15.20	6.60	10.6	600.7	5.81	200.0	1.43	.275										
1235		10/5	4	13.75	55	15.64	6.76	10.8	601.4	5.78	200.2	1.27	.55										
1240		10/5	4	15	60	16.28	6.96	11.0	603.0	5.43	201.5	0.94	.85										
1245	(40)	10/5	4	13.75	55	16.92	7.10	10.8	603.6	5.67	199.6	1.24	1.125										
1250		10/5	4	13.75	55	17.35	7.18	10.6	604.3	5.73	199.7	1.15	1.4										
1255		10/5	4	12.5	50	17.70	7.24	10.3	605.5	5.62	266.4	1.09	1.65										
1300		10/5	4	12.5	50	17.98	7.26	10.2	603.8	5.59	267.9	1.06	1.9										
1305		10/5	4	12.5	50	18.14	7.26	10.3	603.1	5.63	268.4	1.02	2.15										
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 units	3%	3%		10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU											
Stabilization Achieved (Y/N)				N	Y	Y	Y	Y		Y	Y	Y											

Sampling/Purging Equipment	
Water Level Meter:	<u>Solisat</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>65.35</u>
Tubing:	<u>1/4" Poly</u>

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			<u>SEE COC</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

SAMPLE COLLECTION TIME	START	END
	1305	(40)

Comments: Total Purge Volume = 2.15 Liters

Had to drop flow rate below 100 because of drawdown.

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421B62
 Date: 12-19-13
 Weather: 35°F Sunny

Well ID: MW-615
 Sample ID: MW-615/20131219
 Sampler: J. Underwood
 Signature: John Underwood

Well Condition Observations				
Protective Casing:	<u>None</u>			
Lock:	<u>None</u>			
Label:	<u>None</u>			
Surface Seal:	<u>None</u>			
PVC Well Casing:	<u>None</u>			

Well Volume Calculations				
Well Diameter (in.):	<u>2</u>			
Depth to Water (ft.):	<u>15.37</u>			
Total Depth (ft.):	<u>21.64</u>			
Well Volume (gal.):	<u>0.95</u>			

Pump Start: 1220

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SL)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1225	10/5	4	62.5	250	15.97	6.01	11.4	282.0	6.14	93.5	149	1.25	
1230	10/5	4	50	200	15.96	6.00	11.5	282.8	4.62	87.5	94.9	2.25	
1235	10/5	4	50	200	15.96	5.91	11.5	284.2	3.79	81.1	60.7	3.25	
1240	10/10	4	56.75	225	15.96	5.91	11.5	285.0	3.66	78.0	51.5	4.15	
1245	10/15	4	31.25	125	15.96	5.93	11.5	287.6	3.79	76.6	42.9	4.75	
1250	10/10	4	37.5	150	15.96	5.94	11.5	289.3	4.01	75.5	31.3	5.5	
1255	10/5	4	37.5	150	15.96	5.95	11.5	288.6	4.03	74.7	22.2	6.25	
1300	10/5	4	37.5	150	15.96	5.94	11.5	289.3	3.93	75.0	22.2	7.0	
1305	10/5	4	37.5	150	15.96	5.95	11.6	288.9	3.95	75.0	17.1	7.75	
1310	10/10	4	37.5	150	15.96	5.96	11.5	287.5	3.92	74.4	16.5	8.5	
1315	10/15	4	37.5	150	15.96	5.96	11.5	287.0	3.95	74.5	16.5	9.25	
<u>John Underwood</u>													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L		+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU	
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	X		Y	Y	

Sampling/Purging Equipment	
Water Level Meter:	<u>Sutinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LAMOTTE</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>18.69</u>
Tubing:	<u>1/4 in. Poly</u>

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
<u>See Chain of Custody</u>			
<u>GW</u>			

SAMPLE COLLECTION TIME	START	END
<u>14:15</u>		<u>13:45</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/s/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 9.25 L • Also sampled MW-615/20131219FB
Filtered sample for metals analysis because turbidity was >5 NTUs

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12/19/13
 Weather: 35°F Sunny

Well ID: MW-33
 Sample ID: MW-33/20131219
 Sampler: Luke Chmielecki
 Signature: L. Chmielecki

Well Condition Observations			
Protective Casing:	<u>Good</u>		
Lock:			
Label:	<u>✓</u>		
Surface Seal:			
PVC Well Casing:			

Well Volume Calculations	
Well Diameter (in.):	<u>1.5"</u>
Depth to Water (ft.):	<u>18.28</u>
Total Depth (ft.):	<u>21.80</u>
Well Volume (gal.):	<u>.32</u>

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (nS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (Liter or gallons)
1540	/	5/5	8	5	40	18.32	5.44	6.4	205.1	3.54	245.5	3.59	.2
1545	/	5/5	8	5	40	18.32	5.11	6.7	203.6	2.25	236.8	2.61	.4
1550	60	5/5	8	5	40	18.32	5.07	7.3	200.6	2.07	235.4	2.05	.6
1555	/	5/5	8	5	40	18.32	5.05	7.2	200.9	2.04	235.1	1.96	.8
1600	/	5/5	8	5	40	18.32	5.06	7.1	201.2	2.04	235.0	1.91	1
Graph showing the decrease in water level over time during purging.													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.5'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings > 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				N	y	Y	Y	Y	y	y	y	y	

Sampling/Purging Equipment	
Water Level Meter	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump	<u>Micro Bladder</u>
Intake Depth (feet below PVC):	<u>18.00</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			SEE COC

SAMPLE COLLECTION TIME	START	END
	1600	<u>1600</u>

Comments: Total Purge Volume = 1 Liter
 Low flow rate because of microbladder pump.

ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12-19-13
 Weather: 30°F Clear

Well ID: MW-61D
 Sample ID: MW-61D/20131219
 Sampler: J. Underwood
 Signature: J. W. Underwood

Well Condition Observations		
Protective Casing:	<u>good</u>	
Lock:		
Label:		
Surface Seal:		
PVC Well Casing:		

Well Volume Calculations		
Well Diameter (in.):	<u>2</u>	
Depth to Water (ft.):	<u>16.20</u>	
Total Depth (ft.):	<u>53.70</u>	
Well Volume (gal.):	<u>6.13</u>	

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SDI)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
													Pump Start: 1510
1520	10/5	4	45	180	16.25	5.94	11.2	524	16.31	132.7	0.00	4.80	
1525	10/5	4	45	180	16.25	5.87	11.2	555	6.80	118.4	0.00	2.70	
1530	10/5	4	45	180	16.25	5.86	11.2	561	5.44	112.5	0.00	3.60	
1535	10/5	4	50	200	16.25	5.86	11.2	556	4.52	105.2	0.00	4.60	
1540	10/5	4	50	200	16.25	5.86	11.2	556	4.11	100.8	0.00	5.60	
1545	10/5	4	50	200	16.28	5.86	11.2	556	3.93	97.9	0.00	6.60	
1550	10/4	4	50	200	16.27	5.86	11.2	555	3.73	96.4	0.00	7.60	
1555	10/4	4	50	200	16.25	5.87	11.2	556	3.61	95.5	0.00	8.60	
<i>John W. Underwood</i>													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings > 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	Solinst
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	CAMOTTE
Pump:	Bladder
Intake Depth (feet below PVC):	48.78
Tubing:	1/4" Poly

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
See	Chlor		
	of		
	Custody (P)		

SAMPLE COLLECTION TIME	START	END
	1600	1625

Comments: Total Purge Volume = 8.60 L

ENVIRO

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: DB-1421B-G2
 Date: 12-20-13
 Weather: 35°F, clear

Well ID: MW-44S
 Sample ID: MW-44S/20131220
 Sampler: J. Underwood
 Signature: J. Underwood

Well Condition Observations				
Protective Casing:	<u>spud</u>			
Lock:	<u>open</u>			
Label:	<u>SPUD</u>			
Surface Seal:				
PVC Well Casing:				

Well Volume Calculations	
Well Diameter (in.):	<u>2</u>
Depth to Water (ft.):	<u>16.53</u>
Total Depth (ft.):	<u>27.65</u>
Well Volume (gal.):	<u>1.91</u>

Pump Start: 0805

Time	Throttle SETTING (Feet H ₂ O)	Time Refl/Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
8:15		10/5	4	75	300	16.53	6.80	15.4	171.2	37.15	157.7	3.10	1.5
8:20		10/5	4	62.5	250	16.53	6.77	9.6	119.5	13.58	110.6	1.11	2.75
8:25		10/5	4	62.5	250	16.58	6.72	9.6	117.6	11.25	109.4	0.00	4.0
8:30		10/5	4	65	260	16.58	6.67	9.6	112.8	9.49	112.5	0.00	5.3
8:35		10/5	4	65	260	16.58	6.65	9.6	113.5	9.33	118.2	0.00	6.6
8:40		10/5	4	62.5	250	16.53	6.60	9.7	123.6	8.80	122.0	0.00	7.95
8:45		10/5	4	62.5	250	16.53	6.59	9.7	135.1	8.42	123.2	0.00	9.10
8:50		10/5	4	50	200	16.58	6.58	9.6	142.1	8.02	123.1	0.03	10.10
8:55		10/5	4	50	200	16.58	6.56	9.5	148.1	7.85	123.6	0.00	11.10
9:00		10/5	4	50	200	16.58	6.56	9.5	151.0	7.72	123.7	0.00	12.10
9:05		10/5	4	50	200	16.58	6.56	9.6	151.3	7.60	124.2	0.00	13.10
<u>John W. Underwood</u>													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	± 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	± 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	<u>Buoyant</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>Lat. site</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>22.65</u>
Tubing:	<u>4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = Changed out CO₂ tank at 8:00
13.10 liters/s

Laboratory Analysis/Containers			
Container	Preservative	#	Analysis
			<u>See Chain of Custody</u>

SAMPLE COLLECTION TIME	START	END
	<u>905</u>	<u>935</u>

 ENVIRO

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-14218 GZ
 Date: 12-20-13
 Weather: 30°F, clear

Well ID: MW-44D
 Sample ID: MW-44D/20131220
 Sampler: J.Underwood
 Signature: J.W.Underwood

Well Condition Observations				
Protective Casing:				
Lock:				
Label:				
Surface Seal:				
PVC Well Casing:				

Well Volume Calculations	
Well Diameter (in.):	<u>2</u>
Depth to Water (ft.):	<u>17.14</u>
Total Depth (ft.):	<u>73.68</u>
Well Volume (gallons):	<u>9.23</u>

Pump Start: 10:30 9:30

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SI)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
945	845	10/5	4	50	200	17.14	6.17	9.4	331.9	4.06	109.9	1.69	1.0
850	850	10/5	4	50	200	17.14	6.03	9.6	473.8	3.04	121.7	1.32	2.0
955	855	10/5	4	50	200	17.14	5.96	9.8	500	1.82	132.7	1.24	3.0
1000	900	10/5	4	50	200	17.14	5.94	9.9	518	1.54	134.6	0.00	4.0
1005	905	10/5	4	50	200	17.14	5.92	9.8	564	1.26	132.5	0.00	5.0
1010	910	10/5	4	50	200	17.14	5.92	9.9	610	1.03	127.7	0.00	6.0
1015	915	10/5	4	50	200	17.14	5.92	9.9	639	0.95	122.9	0.00	7.0
1020	920	10/5	4	50	200	17.14	5.91	9.9	739	0.86	119.6	0.00	8.0
1025	925	10/5	4	50	200	17.14	5.91	9.9	771	0.80	117.4	0.00	9.0
1030	930	10/5	4	50	200	17.14	5.91	9.9	880	0.70	115.2	0.00	10.0
1035													
1040													
1045													

J.W.Underwood

Stabilization Criteria: 100 - 400 mL/min, Drawdown < 0.3', +/- 0.1 units, 3%, 3% 10% > 0.5 mg/L or 3 consecutive readings > 0.5 mg/L, +/- 10 mV, 10% > 5 NTU or 3 consecutive readings < 5 NTU

Stabilization Achieved (Y/N):

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>68.68</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 13.0 L

Laboratory Analytical Containers			
Container	Preservative	#	Analysis
<u>See Chain of Custody</u>			

SAMPLE COLLECTION TIME	START	END
	<u>10:45</u>	

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12/20/13
 Weather: 30°F Clear

Well ID: MW-435
 Sample ID: MW-435/20131220
 Sampler: Luke Chmielecki
 Signature: LCH

Well Condition Observations	
Protective Casing:	<u>Good</u>
Lock:	<u>Open</u>
Label:	<u>None</u>
Surface Seal:	
PVC Well Casing:	<u>Down</u>

Well Volume Calculations	
Well Diameter (in.):	<u>2"</u>
Depth to Water (ft.):	<u>18.35</u>
Total Depth (ft.):	<u>33.63</u>
Well Volume (gal.):	<u>2.49</u>

Pump Start: 1115

Time	Throttle SETTING (Feet H ₂ O)	Time ReffR/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SUS)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1120	<u>10/5</u>	<u>4</u>	<u>50</u>	<u>200</u>	<u>18.38</u>	<u>5.98</u>	<u>11.9</u>	<u>1575</u>	<u>0.84</u>	<u>267.6</u>	<u>3.36</u>	<u>1</u>	
1125	<u>10/5</u>	<u>4</u>	<u>50</u>	<u>200</u>	<u>18.39</u>	<u>5.97</u>	<u>11.9</u>	<u>1585</u>	<u>0.68</u>	<u>267.4</u>	<u>2.92</u>	<u>2</u>	
1130	<u>10/5</u>	<u>4</u>	<u>50</u>	<u>200</u>	<u>18.40</u>	<u>5.97</u>	<u>11.9</u>	<u>1585</u>	<u>0.64</u>	<u>267.4</u>	<u>2.51</u>	<u>3</u>	
1135	<u>10/5</u>	<u>4</u>	<u>50</u>	<u>200</u>	<u>18.40</u>	<u>5.98</u>	<u>11.9</u>	<u>1586</u>	<u>0.58</u>	<u>266.1</u>	<u>2.32</u>	<u>4</u>	
1140	<u>10/5</u>	<u>4</u>	<u>50</u>	<u>200</u>	<u>18.40</u>	<u>5.98</u>	<u>11.9</u>	<u>1587</u>	<u>0.57</u>	<u>265.4</u>	<u>2.26</u>	<u>5</u>	
1145	<u>10/5</u>	<u>4</u>	<u>50</u>	<u>200</u>	<u>18.46</u>	<u>5.97</u>	<u>11.9</u>	<u>1587</u>	<u>0.56</u>	<u>264.9</u>	<u>2.19</u>	<u>6</u>	
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	± 0.1 mds	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	± 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling Procedure Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C. Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>La Motte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>28.50</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/s/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analytical Containers			
Container	Preservative	#	Analysis
			<u>500 COC</u>

SAMPLE COLLECTION TIME	START	END
	<u>1145</u>	<u>1145</u>

Comments: Total Purge Volume = 6 liters

Duplicate sample taken under DUP-20131220



LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
Project No.: 08-14218G2
Date: 12/20/13
Weather: 30° Clear

Well ID: MW-43D
Sample ID: MW-43D/20131220
Sampler: Luke Chmielecki
Signature: 

Well Condition Observations	
Protective Casing:	Good
Lock:	
Label:	
Surface Seal:	
PVC Well Casing:	

Well Volume Calculations	
Well Diameter (in.):	2"
Depth to Water (ft.):	18.60
Total Depth (ft.):	69.65
Well Volume (gal.):	8.33

Pump Start: 1340

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1245	10/5	4	37.5	150	18.62	5.40	11.7	2201	0.41	265.9	7.98	.75	
1250	10/5	4	37.5	150	18.65	5.37	11.6	2170	0.32	265.0	5.55	1.5	
1255	10/5	4	38.8	155	18.65	5.35	11.5	2166	0.29	265.2	4.62	2.275	
1300	10/5	4	37.5	150	18.65	5.34	11.6	2161	0.24	264.9	3.19	3.025	
1305	10/5	4	37.5	150	18.65	5.34	11.6	2158	0.21	264.7	2.69	3.775	
1310	10/5	4	36.3	145	18.65	5.32	11.5	2156	0.19	264.7	2.57	4.5	
1315	10/5	4	37.5	150	18.65	5.33	11.5	2154	0.18	264.7	2.44	5.25	

Sampling/Purging Equipment	
Water Level Meter:	Solisit
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	La Motte
Pump:	Bladder
Intake Depth (feet below PVC):	64.65
Tubing:	1/4" Pah

Laboratory Analytes/Containers			
Container	Preservative	#	Analysis
See COC			

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

	START	END
SAMPLE COLLECTION TIME	1315	1400

Comments: Total Purge Volume = 5.25 Liters

ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 03-1421862
 Date: 12-20-13
 Weather: 30°F, P. cloudy

Well ID: MW-44B
 Sample ID: MW-44B/2013/220
 Sampler: J. Underwood
 Signature: John Winkowski

Well Condition Observations	
Protective Casing:	<u>u/bt</u>
Lock:	<u>g</u>
Lid(s):	<u>g</u>
Surface Seal:	<u>v</u>
PVC Well Casing:	

Well Volume Calculations	
Well Diameter (in.):	<u>2.0</u>
Depth to Water (ft.):	<u>17.99</u>
Total Depth (ft.):	<u>83.70</u>
Well Volume (gal.):	<u>10,735 gallons</u>

Pump Start: 1310

Time	Throttle SETTING (Feet H ₂ O)	Time Reflv/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TTEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1335	5/5	6	16.6	100	18.72	4.85	8.8	354.5	5.18	133.5	0.00	0.0	
1340	5/5	6	16.6	100	18.85	4.72	9.0	358.0	4.21	123.5	0.00	0.5	
1345	5/5	6	16.6	100	18.93	4.65	9.0	359.7	3.46	116.5	0.00	1.0	
1350	5/5	6	16.6	100	18.97	4.64	9.0	360.1	2.84	112.0	0.00	1.5	
1355	5/5	6	16.6	100	18.99	4.63	9.0	360.9	2.03	109.0	0.00	2.0	
1400	5/5	6	16.6	100	19.05	4.63	9.0	359.1	1.84	106.9	0.00	2.5	
1405	5/5	6	16.6	100	19.08	4.64	9.0	357.1	1.71	104.2	0.00	3.0	
1410	5/5	6	16.6	100	19.08	4.66	9.0	357.7	1.65	103.2	0.0	3.5	
1415	5/5	6	16.6	100	19.06	4.67	9.0	357.5	1.60	103.5	0.0	4.0	
<i>John Winkowski</i>													
Stabilization Criteria				100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 mds	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)													

Sampling/Purging Equipment	
Water Level Meter:	<u>Spinnst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>Lambite</u>
Pump:	<u>Micro Bladder</u>
Intake Depth (feet below PVC):	<u>80.78</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 4.0 LITERS

Microbladder pump used b/c of obstruction @ 10'

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
See Chain of Custody	V/gu		

SAMPLE COLLECTION TIME	START	END
	<u>1415</u>	<u>1445</u>

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

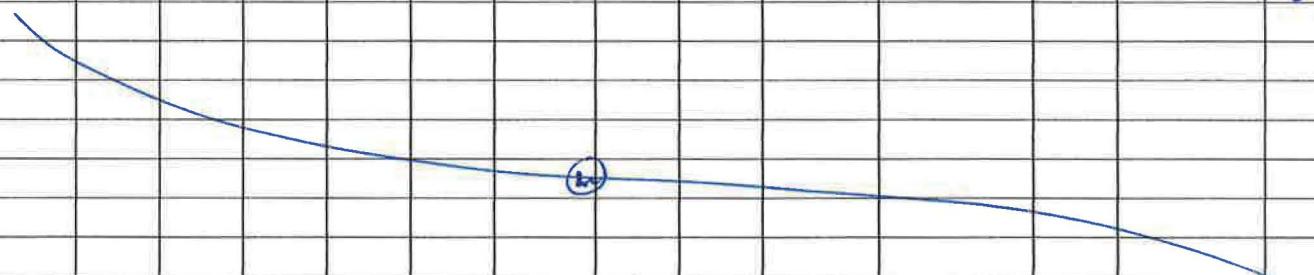
Site: Thomaston
 Project No.: 08-14218 G2
 Date: 12/20/13
 Weather: 30°F Clear

Well ID: MW-31D
 Sample ID: MW-31D/20131220
 Sampler: Luke Chmielecki
 Signature: ZSC

Well Condition Observations				
Protective Casing:	<u>Good</u>			
Lock:				
Label:	<u>12</u>			
Surface Seal:				
PVC Well Casing:				

Well Volume Calculations	
Well Diameter (in.):	<u>2"</u>
Depth to Water (ft.):	<u>17.32</u>
Total Depth (ft.):	<u>33.43</u>
Well Volume (gal.):	<u>2.63</u>

Pump Start: 1420

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1425	/	10/5	4	56.25	225	17.32	6.39	13.3	446.3	0.15	214.5	6.62	1.125
1430		10/5	4	56.25	225	17.32	6.42	13.4	472.4	0.09	214.5	5.19	2.25
1435	12	10/5	4	50	200	17.32	6.49	13.4	504.9	0.02	214.1	4.66	3.25
1440		10/5	4	50	200	17.32	6.51	13.3	518.0	0.02	214.1	3.55	4.25
1445		10/5	4	56.25	225	17.32	6.52	13.4	521.9	0.03	214.0	3.16	5.375
1450		10/5	4	56.25	225	17.32	6.51	13.4	521.2	0.03	214.0	3.09	6.5
													
Stabilization Criteria				100 - 400 mL/min	Drawdown <0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>28.43</u>
	<u>1/4" Poly</u>

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			<u>SEE COC</u>

SAMPLE COLLECTION TIME	START	END
	<u>1450</u>	<u>1450</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 6.5 Liters

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-42106-2
 Date: 12-23-13
 Weather: 50°F, Rain

Well ID: MW-31B
 Sample ID: MW-31B/20131223
 Sampler: J. Underwood
 Signature: John Underwood

Well Condition Observations	
Protective Casing:	/
Lock:	good
Label:	
Surface Seal:	
PVC Well Casing:	

Well Volume Calculations	
Well Diameter (in.):	2
Depth to Water (ft.):	16.90
Total Depth (ft.):	47.60
Well Volume (gal.):	5.03

Time	Throttle SETTING (Feet H ₂ O)	Time Refl/W Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SCH)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (mL or gallons)
													900
905	10/5	4	25	100	17.91	6.57	13.1	2082	5.55	-114.6	0.09	0.50	
910	10/5	4	25	100	18.69	6.56	13.2	2077	4.45	-104.9	0.00	1.0	
915	10/5	4	25	100	19.84	6.60	13.2	2074	2.97	-113.4	0.00	1.5	
920	10/5	4	1875	75	20.42	6.61	13.1	2061	2.57	-111.7	0.00	1.875	
925	10/5	4	12.5	50	20.80	6.62	12.0	2135	2.212	-107.1	0.00	2.125	
930	10/5	4	12.5	50	21.08	6.63	12.2	2137	2.18	-104.2	0.00	2.375	
935	10/5	4	12.5	50	21.25	6.63	12.1	2162	2.191	-104.3	0.00	2.625	
940	10/5	4	12.5	50	21.31	6.63	12.1	2133	2.91	-106.0	0.00	2.875	
<hr/>													
<i>John Underwood</i>													
Stabilization Criteria				100 - 400 mL/min	Drawdown <0.3'	±0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings <0.5 mg/L	44-10 mV	10% > 5 NTU or 3 consecutive readings <5 NTU		
Stabilization Achieved (Y/N)				N*	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	Solinst
pH/S.C./Dissolved Oxygen/ORP:	YSI
Turbidity:	Lanotte
Pump:	Blaster
Intake Depth (feet below PVC):	42.60
Tabing:	44" Poly

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			See chart of custody
			ju

SAMPLE COLLECTION TIME	START	END
10/5		10/10

Comments: Total Purge Volume = 3.0 Liters

A slowed flow rate to 50 mL/min because of drawdown. Small flow cell (250mL) allows for low flow rate while still including "turn over."



LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12/23/13
 Weather: 50°F Rain

Well ID: MW-36
 Sample ID: MW-36/20131223
 Sampler: Luke Chmielecki
 Signature: L. Chmielecki

Well Condition Observations	
Protective Casing:	<u>Good</u>
Lock:	<u>no lock</u>
Label:	<u>Good</u>
Surface Seal:	<u>Good</u>
PVC Well Casing:	<u>Rope and Brainerd Stock</u>

Well Volume Calculations	
Well Diameter (in.):	<u>1.5</u>
Depth to Water (ft.):	<u>6.20</u>
Total Depth (ft.):	<u>*</u>
Well Volume (gal.):	<u>~ 2.33</u>

Pump Start: 0920

Time	Throttle SETTING (Pest H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DESSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
0925	/	/	/	/	200	6.20	6.59	10.6	314.0	4.85	237.2	6.63	1
0930	/	/	/	/	200	6.20	6.45	10.6	314.2	5.30	236.0	4.14	2
0935	(1)	(1)	(1)	(1)	200	6.20	6.42	10.7	314.3	5.39	235.7	3.46	3
0940	/	/	/	/	200	6.20	6.41	10.6	314.4	5.42	235.4	3.29	4
0945	/	/	/	/	200	6.20	6.40	10.7	314.6	5.45	235.1	3.16	5
Stabilization Criteria				100 - 400 mL/min	Downslope <0.3°	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings > 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>La Motte</u>
Pump:	<u>Peristaltic</u>
Intake Depth (feet below PVC):	<u>26.5'</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			<u>See COC</u>

SAMPLE COLLECTION TIME	START	END
0945	(1)	(1)

Comments: Total Purge Volume = 5 Liters

*unable to get W.L.I. past 7.40' installation notes say screened 21.5-31.5'

used peristaltic pump because of obstruction.



LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12/23/13
 Weather: 50°F Rain

Well ID: MW-370
 Sample ID: MW-370/20131223
 Sampler: Luke Chmielecki
 Signature: Luke Chmielecki

Well Condition Observations			
Protective Casing:	<u>Good</u>		
Lock:	<u>No lock</u>		
Label:	<u>mislabeled as MW-37B</u>		
Surface Seal:	<u>Good</u>		
PVC Well Casing:	<u>Good</u>		

Well Volume Calculations	
Well Diameter (in.):	<u>2"</u>
Depth to Water (ft.):	<u>4.97</u>
Total Depth (ft.):	<u>33.30</u>
Well Volume (gal.):	<u>4.62</u>

Pump Start: 1020

Time	Throttle SETTING (Feet H2O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SL)	TEMP (°C)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1025	/	1015	4	50	200	4.98	6.15	9.8	332.8	6.77	241.6	5.02	1
1030	/	1015	4	50	200	4.99	6.13	10.1	332.0	6.98	241.7	4.44	2
1035	1015	1015	4	50	200	5.00	6.10	10.2	331.6	7.09	241.8	4.16	3
1040	1015	1015	4	50	200	5.00	6.06	10.3	331.0	7.13	241.9	3.40	4
1045	1015	1015	4	50	200	5.00	6.05	10.4	330.7	7.15	241.9	3.29	5
1050	1015	1015	4	50	200	5.00	6.04	10.4	330.5	7.17	241.9	3.20	6
Stabilization Criteria			100 - 400 mL/min	Drawdown < 0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU			
Stabilization Achieved (Y/N)			Y	Y	Y	Y	Y	Y	Y	Y			

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/H ₂ S/C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>30.50</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min, the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 6 Liters

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			see COC

SAMPLE COLLECTION TIME	START	END
	<u>1050</u>	<u>1050</u>



LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
Project No.: 08-14218G2
Date: 12/23/13
Weather: 50°F Rain

Well ID: MW-37B
Sample ID: MW-37B/20131223
Sampler: Luke Chmielecki
Signature: L.C.

Well Condition Observations			
Protective Casing:	<u>Good</u>		
Lock:	<u>no lock</u>		
Label:	<u>mislabeled as MW-37D</u>		
Surface Seal:	<u>Good</u>		
PVC Well Casing:	<u>Good</u>		

Well Volume Calculations	
Well Diameter (in.):	<u>2"</u>
Depth to Water (ft.):	<u>5-10</u>
Total Depth (ft.):	<u>67.40</u>
Well Volume (gal.):	<u>10.46</u>

Pump Start: 1155

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL/min)	FLOW RATE (mL/min)	DEPTH TO WATER (feet)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (μS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (liters or gallons)
1200		<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.11</u>	<u>6.56</u>	<u>10.0</u>	<u>350.4</u>	<u>3.62</u>	<u>235.8</u>	<u>7.20</u>	.5
1205		<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.12</u>	<u>6.60</u>	<u>10.0</u>	<u>350.3</u>	<u>3.42</u>	<u>235.9</u>	<u>6.19</u>	1
1210		<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.13</u>	<u>6.63</u>	<u>10.0</u>	<u>350.4</u>	<u>3.30</u>	<u>236.0</u>	<u>4.92</u>	1.5
1215	<u>(AD)</u>	<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.13</u>	<u>6.65</u>	<u>9.9</u>	<u>350.5</u>	<u>3.26</u>	<u>236.4</u>	<u>4.10</u>	2
1220		<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.13</u>	<u>6.66</u>	<u>9.8</u>	<u>350.6</u>	<u>3.24</u>	<u>236.7</u>	<u>3.96</u>	2.5
1225		<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.13</u>	<u>6.66</u>	<u>9.7</u>	<u>350.6</u>	<u>3.23</u>	<u>236.9</u>	<u>3.88</u>	3
1230		<u>10/5</u>	<u>4</u>	<u>25</u>	<u>100</u>	<u>5.13</u>	<u>6.67</u>	<u>9.7</u>	<u>350.5</u>	<u>3.24</u>	<u>236.2</u>	<u>3.81</u>	3.5
Stabilization Criteria				100 - 400 mL/min	Drawdown <=0.3'	+/- 0.1 units	3%	3%	10% > 0.5 mg/L or 3 consecutive readings < 0.5 mg/L	+/- 10 mV	10% > 5 NTU or 3 consecutive readings < 5 NTU		
Stabilization Achieved (Y/N)				Y	Y	Y	Y	Y	Y	Y	Y		

Sampling/Purging Equipment	
Water Level Meter:	<u>Solinst</u>
pH/S.C./Dissolved Oxygen/ORP:	<u>YSI</u>
Turbidity:	<u>LaMotte</u>
Pump:	<u>Bladder</u>
Intake Depth (feet below PVC):	<u>62.40</u>
Tubing:	<u>1/4" Poly</u>

Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

Comments: Total Purge Volume = 3.5 Liters

Laboratory Analyses/Containers			
Container	Preservative	#	Analysis
			<u>See COC</u>

SAMPLE COLLECTION TIME	START	END
	<u>1230</u>	<u>1230</u>

 ENVIRON

LOW FLOW GROUNDWATER SAMPLING FIELD FORM

Site: Thomaston
 Project No.: 08-1421862
 Date: 12-23-13
 Weather: 50° F, rain

Well ID: MW-315
 Sample ID: MW-315/2013/223
 Sampler: J. Underwood
 Signature: John W. Underwood

Well Condition Observations	
Protective Casing:	<u>yes</u>
Lock:	<u>yes</u>
Label:	<u>yes</u>
Surface Seal:	<u>yes</u>
PVC Well Casing:	<u>yes</u>

Well Volume Calculations	
Well Diameter (in.):	<u>1.5</u>
Depth to Water (ft.):	<u>14.90</u>
Total Depth (ft.):	<u>26.91</u>
Well Volume (gal.):	<u>1.10</u>

Pump Start: 1315

Time	Throttle SETTING (Feet H ₂ O)	Time Refill/ Discharge	Cycles per Minute	Discharge Volume/Cycle (mL)	FLOW RATE (mL/min)	DEPTH TO WATER (ft.)	pH (SU)	TEMP (°C)	SPECIFIC CONDUCTANCE (mS/cm)	DISSOLVED OXYGEN (mg/L)	ORP (mV)	TURBIDITY (NTU)	TOTAL PURGE VOLUME (Liter or gallons)
1320	5.5	8	33.3	200	15.93	5.45	13.9	804	0.39	-158.6	17.3	1.0	
1325	5.5	8	33.3	200	16.30	5.80	14.5	981	0.22	-177.5	11.6	2.0	
1330	5.5	6	33.3	200	16.57	6.10	14.6	999	0.14	-179.0	9.47	3.0	
1335	5.5	6	33.3	200	16.50	6.19	14.7	987	0.12	-182.0	8.42	4.0	
1340	5.5	6	33.3	200	16.65	6.21	14.8	976	0.11	-185.0	5.44	5.0	
1345	5.5	6	33.3	200	16.72	6.19	14.8	967	0.10	-185.0	4.93	6.0	
1350	5.5	6	33.3	200	16.75	6.24	14.9	930	0.09	-187.0	4.23	7.0	
1355	5.5	6	33.3	200	16.75	6.24	14.8	967	0.09	-187	4.39	8.0	

Sampling/Purging Equipment
Water Level Meter: <u>Soilstat</u>
pH/S.C./Dissolved Oxygen/ORP: <u>YSI</u>
Turbidity: <u>Lamotte</u>
Pump: <u>Micro Bladder</u>
Intake Depth (feet below PVC): <u>21.91</u>
Tubing: <u>1/4" PTFE</u>

Laboratory Analysis/Containers			
Container	Preservative	#	Analysis
See Chain of Custody			
9L			

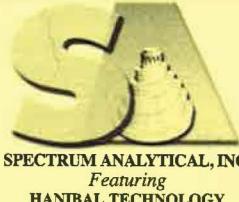
Note: During well purging, monitor indicator field parameters (turbidity, temperature, specific conductance, pH, ORP, DO) at a minimum frequency of 3-5 minute intervals or greater. The pump's flow rate must be able to "turn over" at least one (1) flow-through-cell volume between measurements (for a 250 mL flow-through-cell with a flow rate of 50 mL/min., the monitoring frequency would be every five minutes; for a 500 mL flow-through-cell it would be every ten minutes). If the cell volume cannot be replaced in the five minute interval, then the time between measurements must be increased accordingly.

SAMPLE COLLECTION TIME	START	END
	1400	1430

Comments: Total Purge Volume = 8.0 Liters

Collected DWP/2013/223 at this well
Very strong petroleum odor

ENVIRON



CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford MA

Invoice To: Kris Sibinga
Envirite Corporation
PO Box 591
Chappaqua NY 10514

Telephone #: 603-703-5534
Project Mgr. John Noble

Project No.: 08-14218G2

Site Name: Envirite RCRA Landfill

Location: Thomaston State: CT

Sampler(s): Luke C / John U

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= 12=

List preservative code below:
2 10 5 4 3

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=Trip Blank X2= X3=

Containers: Analyses:

Total Cyanide	Total Metals	Ammonia as N ₂	Total Phenolics	Nitrate as N ₂	Chloride	Conductivity	Sulfate	TDS, TSS
As, Cd, Cu, Pb, Zn	As, Cd, Cu, Pb, Zn	TOH, Phenolics	VOCs 8260	Nitrate as N ₂	Chloride	Conductivity	Sulfate	TDS, TSS

MA DEP MCP CAM Report: Yes No
CT DPH RCP Report: Yes No

QA/QC Reporting Level

- Standard No QC DQA*
- NY ASP A* NY ASP B*
- NJ Reduced* NJ Full*
- TIER II* TIER IV*
- Other CT RCP CT RSRs

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	TOC
TB-20131216	12-16-13	0900		G	X1	1				X	
MW-62B/20131216)	0920		GW	5	1	5	X	X	X	X
MW-62/20131216		0940			5	1	5	X	X	X	X
MW-41S/20131216	1215			5	1	5	X	X	X	X	X
MW-41D/20131216	1155			5	1	5	X	X	X	X	X
MW-41B/20131216	1350			5	1	5	X	X	X	X	X
MW-42S/20131216	12-16-13	1345		G	GW	5	1	5	X	X	X

Relinquished by:

Received by:

Date:

Time:

Temp °C

EDD Format Enviro Equis 4-File

E-mail to jnoble@environcorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Cold Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- Standard TAT - 7 to 10 business days
 Rush TAT - Date Needed: _____
 - All TATs subject to laboratory approval.
 - Min. 24-hour notification needed for rushes.
 - Samples disposed of after 60 days unless otherwise instructed.

Report To: ENVIRON
 3 Carlisle Rd Suite 210
 Westford, MA
 Telephone #: 603-703-5534
 Project Mgr. John Noble

Invoice To: Kris Sibinga
 Envirite Corporation
 PO Box 591
 Chappaqua, NY 10514
 P.O. No.: RQN: 7694

Project No.: 08-14218 G2
 Site Name: Envirite RCRA Landfill
 Location: Thomaston State: CT
 Sampler(s): Luke C / John V

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= 12=

List preservative code below:

2 10 5 4 3

QA/QC Reporting Notes:

* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
 X1= Trap Blank X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:				Analyses:					MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input type="checkbox"/> CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Total Cyanide	As, Ba, Cd, Cr, Cu, Fe, Pb, Mn, Ia, Ni, Zn, Ammonia as N, Total Phenolics	Nitrite as N	Nitrate as N	Chloride, Sulfate	TDS, TSS	
TR-20131218	12/18/13	0800	6	X1	1					X						
MW-503/20131218		0830	1	GW	5	1	5			X X X X X X X X X X						
MW-530/20131218	④	0850	1	④	5	1	5			X X X X X X X X X X						
MW-518/20131218	④	1130	④ ④	5	1	5				X X X X X X X X X X						
MW-510/20131218	↓	1130	↓	5	1	5				X X X X X X X X X X						
MW-423/20131218	12/18/13	1420	6	GW	5	1	5			X X X X X X X X X X						
Relinquished by:	Received by:	Date:	Time:													
K. Noble	Luke C	12-18-13	3:10													

EDD Format Environ Equis 4-File

E-mail to jnoble@environcorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Sealed Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

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- Rush TAT - Date Needed: _____
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- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Telephone #: 603-703-5534
Project Mgr. John Noble

Invoice To: Kris Sibinga
Envirite Corporation
Po Box 591
Chappaqua, NY 10514

P.O. No.: RQN: 7694

Project No.: 08-14218 G2

Site Name: Envirite RCRA Landf. II
Location: Thomaston State: CT
Sampler(s): Luke C / John V

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= 12=

List preservative code below:
2 10 5 4 3

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=Trip Blank X2=Equipment Blank X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:			Analyses:								
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	As, Ba, Cd, Cr, Cu, Fe, Pb, Al, Ni, Mn, Zn	Total Cyanide	As, Ba, Cd, Cr, Cu, Fe, Pb, Al, Ni, Mn, Zn	Ammonia as N, Total Phenolics	Nitrite as N, Nitrate as N	Chloride, Sulfate	TDS, TSS	
MW-30/20131218	12-18-13	1435	6	GW	5	1	5	5	X	X	X	X	X	X	X	X	X
TB-20131219	12-19-13	0800		X1	1					X							
MW-63/20131219		0900		GW	5	1	5			X	X	X	X	X	X	X	X
MW-32S/20131219		1100			5	1	5			X	X	X	X	X	X	X	X
MW-61S/20131219		1315			5	1	5			X	X	X	X	X	X	X	X
MW-55R/20131219		0840			5	1	5			X	X	X	X	X	X	X	X
MW-61S/20131219F		1315															Field Filtered.
MW-32D/20131219	↓	1100		↓	5	1	5			X	X	X	X	X	X	X	X
MW-61R/20131219	12-19-13	1305	↓	GW	5	1	5			X	X	X	X	X	X	X	X
EB-20131218	12-18-13	1000	6	X2	5	1	5			X	X	X	X	X	X	X	X

Relinquished by:

J. Noble

Received by:

Tom Sibinga

Date:

12-19-13

Time:

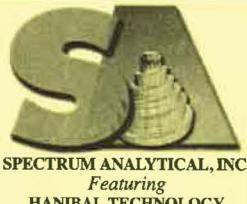
1505

Temp°C

EDD Format Environ Equis 4-File

E-mail to jnobles@envirocorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

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Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Telephone #: 603-703-5534
Project Mgr. John Noble

Invoice To: Kris Sibinga
Envirite Corporation
PO Box 591
Chappaqua, NY 10514

P.O. No.: _____ RQN: 7694

Project No.: 08-14218 G2
Site Name: Envirite RCRA Landfill
Location: Thomaston State: CT
Sampler(s): Luke C / John U

1=Na₂SO₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= _____ 12= _____

List preservative code below:

2 10 5 4 3

QA/QC Reporting Notes:

* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1=T, o Blank X2= _____ X3= _____

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:				Analyses:				MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	8260	TOC	Total Cyanide	As, Ba, Ca, Cr, Cu, Fe, Pb, Mn, Na, Ni, Zn	Ammonia as N, Total Phenolics	Nitrite as N, Nitrate as N	Chloride	Sulfate
MW-61D/20131219	12-19-13	1600	G	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	
MW-33/20131219	12-19-13	1600			5	1	5	X	X	X	X	X	X	X	X	X	X	
DUP-20131220	12-20-13	NA			5	1	5	X	X	X	Y	Y	Y	X	X	Y		
MW-43S/20131220		1145			5	1	5	X	X	X	X	X	X	X	X	X	X	
MW-43D/20131220		1315			5	1	5	X	X	X	Y	Y	X	X	X	Y		
MW-31D/20131220		1450		GW	5	1	5	X	X	X	X	X	X	Y	X	X		
TB-20131220		0900	X1	1				X										
MW-44S/20131220		0945		GW	5	1	5	X	X	X	X	X	X	X	X	X		
MW-44D/20131220		1045		GW	5	1	5	X	Y	X	Y	Y	Y	Y	X	Y		
MW-44B/20131220	12-20-13	1415	G	GW	5	1	5	X	Y	Y	X	Y	Y	Y	Y	Y		

Relinquished by:

Received by:

Date:

Time:

Temp °C

12-20-13 3:20

EDD Format Enviro Equis 4-F.1

E-mail to jnoble@envirocorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Telephone #: 603-703-5534

Project Mgr. John Noble

Invoice To: Kris Sibbinga
Envirite Corporation
P O Box 591
Chappaqua, NY 10514

P.O. No.: _____ RQN: 7694

Project No.: 08-14218G2

Site Name: Envirite RCRA Landf. II

Location: Thomaston

State: CT

Sampler(s): Luke C / John V

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= _____ 12= _____

List preservative code below:

2 10 5 4 3

QA/QC Reporting Notes:

* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=Trip Blank X2=Equipment Blank X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:				Analyses:				MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input type="checkbox"/>	CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Total Cyanide	As, Ba, Cd, Cr, Cu, Fe, Pb, Zn, Mn, Ni, Al, Zr	Amonia as N TOH Phenolics	Nitrite as N Nitrate as N	Chloride, Sulfate		
TR-20131223	12-23-13	0800	G	X1	1					X						
EB-20131223		1300		X2	5	1	5			X	X	X	X	X	X	X
MW-36/20131223		0945		GW	5	1	5			X	X	X	X	X	X	X
MW-37P/20131223		1050		X1	5	1	5			X	X	X	X	X	X	X
MW-37B/20131223		1230		X1	5	1	5			X	X	X	X	X	X	X
MW-31S/20131223		1400		X1	5	1	5			X	X	X	X	X	X	X
MW-31B/20131223		0940		X1	5	1	5			X	X	X	X	X	X	X
DUP-20131223	12-23-13	NA	G	GW	5	1	5			X	X	X	X	X	X	X

Relinquished by:

John Noble

Received by:

John Noble

Date:

12-23-13

Time:

3:15

Temp°C

- EDD Format Environ Equis 4-File
 E-mail to jnoble@environcorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
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Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford MA

Telephone #: 603-703-5534

Project Mgr. John Noble

Invoice To: Kris Sibinga
Envirite Corporation
PO Box 591
Chappaqua NY 10514

P.O. No.: RQN: 7694

Project No.: 08-14218G2

Site Name: Envirite RCRA Landfill

Location: Thomaston

State: CT

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= Deionized Water 10= 11=

List preservative code below:

2

4

QA/QC Reporting Notes:

* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air

X1=Trip Blank X2=Equipment Blank X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:				Analyses:			
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Vols 8260	As, Ba, Cd, Cu, Cr, Fe, Pb, Mn, Ni, Zn		
TB-20131227		12/27/13	1000	G	X1	1				X			
EB-20131227			1200		X2	3		1		X	X		
SW-NR-1/20131227		1030		SW	3			1		X	X		
SW-NR-2/20131227		1050		SW	3			1		X	X		
SW-BB-1/20131227		1140		SW	3			1		X	X		
SW-BB-2/20131227	12/27/13	1120	G	SW	3			1		X	X		

Relinquished by:		Received by:		Date:	Time:	Temp °C	<input type="checkbox"/> EDD Format <u>Enviro Equis 4-file</u>
<u>LJN</u>	<u>JBP</u>			12-30-13	1:28		<input type="checkbox"/> E-mail to <u>jnobles@envirocorp.com</u>
							<input type="checkbox"/> Ambient <input type="checkbox"/> Iced <input checked="" type="checkbox"/> Refrigerated <input type="checkbox"/> Fridge temp ____ °C <input type="checkbox"/> Freezer temp ____ °C

E ENVIRON EQUIPMENT CALIBRATION LOG
PRELIMINARY FIELD DRAFT REVIEW PENDING

PAGE ____ of ____

PROJECT NAME: Envrite RCRA Landfill

FIELD PERSON: Luke C./John U.

PROJECT NUMBER: 08-14218G2

PROJECT MANAGER: John N.

PROJECT LOCATION: Thomaston, CT

FORM DATES: FROM 12/18/13 TO 12/23/13

DATE	EQUIPMENT MODEL/TYPE	SERIAL NUMBER	TEMP. (°C)	STANDARD	PRECALIBRATED READING	CALIBRATED READING
12/18	YSI	10D101573	/	Cond=1000 DO=100 Orp=237.5 pH=4,7,10	Cond=999.7 DO=100 Orp=237.3 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/18	YSI	10E100340	/	↓	Cond=1001 DO=100 Orp=237.2 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/18	Turbidimeter	738	/	10 + 100 + 0	10 + 100 + 0	10 + 100 + 0
12/18	Turbidimeter	ME14843	/	↓	10 + 100 + 0	10 + 100 + 0
12/19	YSI	10D101573	/	Cond=1000 DO=100 Orp=237.5 pH=4,7,10	Cond=1001 DO=100 Orp=237.6 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/19	YSI	10E100340	/	↓	Cond=999.9 DO=100 Orp=237.5 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/19	Turbidimeter	738	/	10 + 100 + 0	10 + 100 + 0	10 + 100 + 0
12/19	Turbidimeter	ME14843	(10)	↓	10 + 100 + 0	10 + 100 + 0
12/20	YSI	10D101573	/	Cond=1000 DO=100 Orp=237.5 pH=4,7,10	Cond=999.8 DO=100 Orp=237.7 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/20	YSI	10E100340	/	↓	Cond=999.9 DO=100 Orp=237.4 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/20	Turbidimeter	738	/	10 + 100 + 0	10 + 100 + 0	10 + 100 + 0
12/20	Turbidimeter	ME14843	/	↓	10 + 100 + 0	10 + 100 + 0
12/23	YSI	10D101573	/	Cond=1000 DO=100 Orp=237.5 pH=4,7,10	Cond=1000 DO=100 Orp=237.7 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/23	YSI	10E100340	/	↓	Cond=999.9 DO=100 Orp=237.4 pH=4,7,10	Cond=1000 DO=100 Orp=237.5 pH=4,7,10
12/23	Turbidimeter	738	/	10 + 100 + 0	10 + 100 + 0	10 + 100 + 0
12/23	Turbidimeter	ME14843	/	↓	10 + 100 + 0	10 + 100 + 0



US Environmental Rental Corporation

(888) 550-8100

www.usenvironmental.com



Company: Environ Corp.
 Contact: Luke Chmielecki
 Phone #: #N/A

166 Riverview Ave, Waltham, MA 02453 (781) 899-1560

91 Prestige Park Circle, Suite 5, East Hartford, CT 06108 (860) 289-8700

5C South Gold Dr, Hamilton, NJ 08691 (609) 570-8555

1202 Tech Blvd., Suite 108, Tampa, FL 33619 (813) 628-4200

Order No.: RR72887
 Date: 12/12/2013
 Technician: IS

Packing List

Item	Serial Number	Tech	QC
Pro Series	13B100162	✓	
Handheld Display	10E100340	✓	
Item	Tech	QC	Item
Cable 30 '	✓		AC Adaptor
Flow Cell	✓		Stand
Barb Kit	✓		D.O Kit
Storage / Cal Cup	✓		Calibration Kit
Sensor Guard	✓		
Manual	✓		
Sonde Cap			
Software			
Extra Batteries	✓		
Display Comm. Cable			
Sonde Comm. Cable			

Calibration Report

Pro Series		13B100162		
Parameter	Accuracy	Before	After	Lot #
Conductivity 1000 µS/cm	(+/- .5%)	971	1000	2AC257
pH 7 Buffer	(+/- .2)	6.83	7.00	8977
pH mV for 7 Buffer	(0 +/- 50)		-22.2	
pH 4 Buffer	(+/- .2)	3.62	4.00	9059
pH mV for 4 Buffer	(180 +/- 50)		150.3	
pH 10 Buffer	(+/- .2)	9.91	10.00	9126
pH mV for 10 Buffer	(-180 +/- 50)		-187.6	
ORP mV, 237.5	(+/- 20 mV)	215.4	200.00	0AB172
DO 100% Sat	(+/- 2%)	91.4%	100.7%	
0% DO Check	(+/- 2%)		0 : 0	00653-00
Turbidity 0 NTU	(+/- 5%)			N/A
Turbidity 126 NTU	(+/- 5%)			12B251235

This document certifies that US Environmental Rental Corporation has provided this rental equipment and all accessories in good working order. It is the renter's responsibility to: a) review all included items upon receipt, b) verify that all items are in acceptable condition and function properly, and c) contact a US Environmental associate immediately if any item is missing, damaged, and/or not functioning properly. Any delay in notifying US Environmental will be considered as the Renter taking responsibility for such missing, damaged, and/or malfunctioning item.

Missing, damaged, and/or malfunctioning equipment and accessories will result in additional fees.



US Environmental Rental Corporation

(888) 550-8100

www.usenvironmental.com



Company: Environ Corp.
 Contact: Luke Chmielecki
 Phone #: #N/A

Order No.: RR72887
 Date: 12/12/2013
 Technician: IS

Packing List

Item	Serial Number		Tech	QC
Pro Series		12B100323	✓	
Handheld Display		10D101573	✓	
Item	Tech	QC	Item	Tech
Cable 90 '	✓		AC Adaptor	
Flow Cell	✓		Stand	
Barb Kit	✓		D.O Kit	✓
Storage / Cal Cup	✓		Calibration Kit	✓
Sensor Guard	✓			
Manual	✓			
Sonde Cap				
Software				
Extra Batteries	✓			
Display Comm. Cable				
Sonde Comm. Cable				

This document certifies that US Environmental Rental Corporation has provided this rental equipment and all accessories in good working order. It is the renter's responsibility to:
 a) review all included items upon receipt, b) verify that all items are in acceptable condition and function properly, and c) contact a US Environmental associate immediately if any item is missing, damaged, and/or not functioning properly. Any delay in notifying US Environmental will be considered as the Renter taking responsibility for such missing, damaged, and/or malfunctioning item.

Missing, damaged, and/or malfunctioning equipment and accessories will result in additional fees.

Calibration Report

Pro Series		12B100323		
Parameter	Accuracy	Before	After	Lot #
Conductivity 1000 µS/cm	(+/- .5%)	1012	1000	2AC257
pH 7 Buffer	(+/- .2)	6.98	7.00	8977
pH mV for 7 Buffer	(0 +/- 50)		-43.3	
pH 4 Buffer	(+/- .2)	4.03	4.00	9059
pH mV for 4 Buffer	(180 +/- 50)		123.3	
pH 10 Buffer	(+/- .2)	9.92	10.00	9126
pH mV for 10 Buffer	(-180 +/- 50)		-208.9	
ORP mV, 237.5	(+/- 20 mV)	202.7	199.90	0AB172
DO 100% Sat	(+/- 2%)	110.2%	99.4%	
0% DO Check	(+/- 2%)		2.30	00653-00
Turbidity 0 NTU	(+/- 5%)			N/A
Turbidity 126 NTU	(+/- 5%)			12B251235

Appendix B

Spectrum Analytical, Inc. Laboratory Reports

Report Date:
30-Dec-13 13:02

- Final Report
 Re-Issued Report
 Revised Report



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Laboratory Report

ENVIRON International Corporation
3 Carlisle Rd
Westford, MA 01886
Attn: John Noble

Project: Envirite RCRA Landfill - Thomaston, CT
Project #: 08-14218G2

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB82039-01	TB-20131216	Trip Blank	16-Dec-13 09:00	16-Dec-13 16:35
SB82039-02	MW-62B/20131216	Ground Water	16-Dec-13 09:20	16-Dec-13 16:35
SB82039-03	MW-62/20131216	Ground Water	16-Dec-13 09:40	16-Dec-13 16:35
SB82039-04	MW-41S/20131216	Ground Water	16-Dec-13 12:15	16-Dec-13 16:35
SB82039-05	MW-41D/20131216	Ground Water	16-Dec-13 11:55	16-Dec-13 16:35
SB82039-06	MW-41B/20131216	Ground Water	16-Dec-13 13:50	16-Dec-13 16:35
SB82039-07	MW-42S/20131216	Ground Water	16-Dec-13 13:45	16-Dec-13 16:35

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director



Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 39 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Project Location: Envirite RCRA Landfill - Thomaston, CT

Sampling Date(s):

12/16/2013

RCP Methods Used:

EPA 335.4 / SW846 9012B

SW846 6010C

SW846 8260C

Client: ENVIRON International Corporation - Westford, MA

Project Number: 08-14218G2

Laboratory Sample ID(s):

SB82039-01 through SB82039-07

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes	No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes	No
1B	<i>VPH and EPH methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes	No
3	Were samples received at an appropriate temperature?	<input checked="" type="checkbox"/> Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	<input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes Yes	<input checked="" type="checkbox"/> No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes	<input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja
 Laboratory Director
 Date: 12/30/2013

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received -0.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

According to CTDEP RCP Quality Assurance and Quality Control Requirements for VOCs by method 8260, SW-846 version 1, 7/28/05 Table 1A, recovery for some VOC analytes have been deemed potentially difficult.

For this work order, the reporting limits have not been referenced or specified.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 300.0

Laboratory Control Samples:

1330117 SRM

Nitrate as N percent recovery is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-41B/20131216
MW-41D/20131216
MW-41S/20131216
MW-42S/20131216
MW-62/20131216
MW-62B/20131216

Nitrite as N percent recovery is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-41B/20131216
MW-41D/20131216
MW-41S/20131216
MW-42S/20131216
MW-62/20131216
MW-62B/20131216

Samples:

This laboratory report is not valid without an authorized signature on the cover page.

EPA 300.0

Samples:

SB82039-02 *MW-62B/20131216*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sulfate as SO₄

SB82039-03 *MW-62/20131216*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82039-04 *MW-41S/20131216*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Sulfate as SO₄

SB82039-05 *MW-41D/20131216*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sulfate as SO₄

The Reporting Limit has been raised to account for matrix interference.

Chloride

SB82039-06 *MW-41B/20131216*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

The Reporting Limit has been raised to account for matrix interference.

Nitrite as N

SB82039-07 *MW-42S/20131216*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

The Reporting Limit has been raised to account for matrix interference.

Nitrite as N

SW846 6010C

Spikes:

1330788-MSD1 *Source: SB82039-03*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

Duplicates:

1331123-DUP1 *Source: SB82039-05*

This laboratory report is not valid without an authorized signature on the cover page.

SW846 6010C

Duplicates:

1331123-DUP1 *Source: SB82039-05*

IMRL raised to correlate to batch QC reporting limits.

Zinc

Samples:

SB82039-02 *MW-62B/20131216*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82039-03 *MW-62/20131216*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82039-04 *MW-41S/20131216*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82039-05 *MW-41D/20131216*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82039-06 *MW-41B/20131216*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82039-07 *MW-42S/20131216*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SW846 8260C

Calibration:

1312070

Analyte quantified by quadratic equation type calibration.

Bromoform

Naphthalene

SW846 8260C

Calibration:

1312070

This affected the following samples:

1330414-BLK1
1330414-BS1
1330414-BSD1
MW-41B/20131216
MW-41D/20131216
MW-41S/20131216
MW-42S/20131216
MW-62/20131216
MW-62B/20131216
S315376-CCV1
S315436-ICV1
TB-20131216

S315436-ICV1

Analyte percent recovery is outside individual acceptance criteria.

Dichlorodifluoromethane (Freon12) (129%)

This affected the following samples:

1330414-BLK1
1330414-BS1
1330414-BSD1
MW-41B/20131216
MW-41D/20131216
MW-41S/20131216
MW-42S/20131216
MW-62/20131216
MW-62B/20131216
S315376-CCV1
TB-20131216

Sample Acceptance Check Form

Client: ENVIRON International Corporation - Westford, MA
Project: Envirite RCRA Landfill - Thomaston, CT / 08-14218G2
Work Order: SB82039
Sample(s) received on: 12/16/2013
Received by: Jessica Hoffman

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
1. Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were samples refrigerated upon transfer to laboratory representative?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

TB-20131216

SB82039-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

16-Dec-13 09:00

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

TB-20131216

SB82039-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

16-Dec-13 09:00

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	100	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	100	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	97	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	96	70-130 %	"	"	"	"	"	"	"	"	"	"

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Sample Identification

MW-62B/20131216

SB82039-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 09:20

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	17.3		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-62B/20131216

SB82039-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 09:20

Received

16-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	90.8		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	100		70-130 %									
2037-26-5	Toluene-d8	100		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	96		70-130 %									
1868-53-7	Dibromofluoromethane	96		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	CPA	1330325
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Sample Identification

MW-62B/20131216

SB82039-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 09:20

Received

16-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	26-Dec-13	ARF	1330788	X
7440-39-3	Barium	0.0204		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0818		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0130		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	43.7		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0110		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.100	R06	mg/l	0.100	0.0039	1	"	27-Dec-13	27-Dec-13	"	1331123	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330531	X
16887-00-6	Chloride	16.0		mg/l	1.00	0.124	1	EPA 300.0	16-Dec-13	16-Dec-13	ELE	1330117	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	20-Dec-13	20-Dec-13	RLT	1330696	X
14797-55-8	Nitrate as N	< 0.100		mg/l	0.100	0.0210	1	EPA 300.0	16-Dec-13 15:37	16-Dec-13 22:03	ELE	1330117	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	16-Dec-13 15:37	16-Dec-13 22:03	"	"	X
	Total Dissolved Solids	403		mg/l	5	3	1	SM2540C	18-Dec-13	18-Dec-13	CMB	1330301	X
	Total Suspended Solids	5.0		mg/l	5.0	1.7	1	SM2540D	18-Dec-13	19-Dec-13	BD	1330449	X
14808-79-8	Sulfate as SO4	174	D, GS1	mg/l	7.00	2.47	7	EPA 300.0	16-Dec-13	16-Dec-13	ELE	1330117	X
	Total Organic Carbon	3.42		mg/l	1.00	0.283	1	SM 5310B	18-Dec-13	18-Dec-13	TDD	1330590	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	19-Dec-13	19-Dec-13	CT007	262707A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	[none]

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Sample Identification

MW-62/20131216

SB82039-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 09:40

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	85.0		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-62/20131216

SB82039-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 09:40

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	23.2		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	37.3		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	1.50		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	99		70-130 %									
2037-26-5	Toluene-d8	101		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	96		70-130 %									
1868-53-7	Dibromofluoromethane	96		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	CPA	1330325
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Sample Identification

MW-62/20131216

SB82039-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 09:40

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	26-Dec-13	ARF	1330788	X
7440-39-3	Barium	0.120		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0092		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	1.59		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	2.34		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	73.2		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0092		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.100	R06	mg/l	0.100	0.0039	1	"	27-Dec-13	27-Dec-13	"	1331123	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330531	X
16887-00-6	Chloride	116	D, GS1	mg/l	7.00	0.868	7	EPA 300.0	16-Dec-13	16-Dec-13	ELE	1330117	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	26-Dec-13	RLT	1330958	X
14797-55-8	Nitrate as N	8.07	D, GS1	mg/l	0.700	0.147	7	EPA 300.0	16-Dec-13 15:37	16-Dec-13 22:49	ELE	1330117	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	16-Dec-13 15:37	16-Dec-13 23:10	"	"	X
	Total Dissolved Solids	528		mg/l	5	3	1	SM2540C	18-Dec-13	18-Dec-13	CMB	1330301	X
	Total Suspended Solids	12.0		mg/l	5.0	1.7	1	SM2540D	18-Dec-13	19-Dec-13	BD	1330449	X
14808-79-8	Sulfate as SO4	173	D, GS1	mg/l	7.00	2.47	7	EPA 300.0	16-Dec-13	16-Dec-13	ELE	1330117	X
	Total Organic Carbon	2.06		mg/l	1.00	0.283	1	SM 5310B	18-Dec-13	18-Dec-13	TDD	1330590	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	19-Dec-13	19-Dec-13	CT007	262707A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	63.8		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	[none]

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Sample Identification

MW-41S/20131216

SB82039-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 12:15

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	22.8		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-41S/20131216

SB82039-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 12:15

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	6.63		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	10.5		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	100			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	97			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	96			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			CPA	1330325	

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Sample Identification

MW-41S/20131216

SB82039-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 12:15

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	26-Dec-13	ARF	1330788	X
7440-39-3	Barium	0.0728		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0800		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0262		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	43.7		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.100	R06	mg/l	0.100	0.0039	1	"	27-Dec-13	27-Dec-13	"	1331123	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330531	X
16887-00-6	Chloride	70.9	D, GS1	mg/l	3.00	0.372	3	EPA 300.0	16-Dec-13	16-Dec-13	ELE	1330117	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	26-Dec-13	RLT	1330958	X
14797-55-8	Nitrate as N	2.93		mg/l	0.100	0.0210	1	EPA 300.0	16-Dec-13 15:37	16-Dec-13 23:35	ELE	1330117	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	16-Dec-13 15:37	16-Dec-13 23:35	"	"	X
	Total Dissolved Solids	262		mg/l	5	3	1	SM2540C	18-Dec-13	18-Dec-13	CMB	1330301	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	18-Dec-13	19-Dec-13	BD	1330449	X
14808-79-8	Sulfate as SO4	68.2	D, GS1	mg/l	3.00	1.06	3	EPA 300.0	16-Dec-13	16-Dec-13	ELE	1330117	X
	Total Organic Carbon	1.15		mg/l	1.00	0.283	1	SM 5310B	18-Dec-13	18-Dec-13	TDD	1330590	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	19-Dec-13	19-Dec-13	CT007	262707A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	19.2		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	[none]

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Sample Identification

MW-41D/20131216

SB82039-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 11:55

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	41.3		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-41D/20131216

SB82039-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 11:55

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	9.31		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	17.3		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	1.24		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	99			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	97			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	97			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			CPA	1330325	

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Sample Identification

MW-41D/20131216

SB82039-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 11:55

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	26-Dec-13	ARF	1330788	X
7440-39-3	Barium	0.0590		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0187		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	1.25		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	45.5		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.100	R06	mg/l	0.100	0.0039	1	"	27-Dec-13	27-Dec-13	"	1331123	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330531	X
16887-00-6	Chloride	69.4	D, R01	mg/l	2.00	0.248	2	EPA 300.0	18-Dec-13	18-Dec-13	EE	1330425	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	26-Dec-13	RLT	1330958	X
14797-55-8	Nitrate as N	4.33		mg/l	0.100	0.0210	1	EPA 300.0	16-Dec-13 15:37	17-Dec-13 11:11	ELE	1330117	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	16-Dec-13 15:37	17-Dec-13 11:11	"	"	X
	Total Dissolved Solids	325		mg/l	5	3	1	SM2540C	18-Dec-13	18-Dec-13	CMB	1330301	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	18-Dec-13	19-Dec-13	BD	1330449	X
14808-79-8	Sulfate as SO4	104	D, GS1	mg/l	2.00	0.706	2	EPA 300.0	19-Dec-13	20-Dec-13	EE	1330570	X
	Total Organic Carbon	1.23		mg/l	1.00	0.283	1	SM 5310B	18-Dec-13	18-Dec-13	TDD	1330590	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	19-Dec-13	19-Dec-13	CT007	262707A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	32.1		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	[none]

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Sample Identification

MW-41B/20131216

SB82039-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 13:50

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	65.4		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-41B/20131216

SB82039-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 13:50

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	6.46		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	21.6		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	99			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	100			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	96			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	95			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			CPA	1330325	

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Sample Identification

MW-41B/20131216

SB82039-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 13:50

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	26-Dec-13	ARF	1330788	X
7440-39-3	Barium	0.0538		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0314		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0070		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	37.3		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.100	R06	mg/l	0.100	0.0039	1	"	27-Dec-13	28-Dec-13	"	1331123	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330531	X
16887-00-6	Chloride	117	D, GS1	mg/l	5.00	0.620	5	EPA 300.0	16-Dec-13	17-Dec-13	ELE	1330117	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	26-Dec-13	RLT	1330958	X
14797-55-8	Nitrate as N	12.2	D, GS1	mg/l	0.500	0.105	5	EPA 300.0	16-Dec-13 15:37	17-Dec-13 11:52	ELE	1330117	X
14797-65-0	Nitrite as N	< 0.500	D, R01	mg/l	0.500	0.495	5	"	16-Dec-13 15:37	17-Dec-13 11:52	"	"	X
	Total Dissolved Solids	812		mg/l	5	3	1	SM2540C	18-Dec-13	18-Dec-13	CMB	1330301	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	18-Dec-13	19-Dec-13	BD	1330449	X
14808-79-8	Sulfate as SO4	315	D, GS1	mg/l	5.00	1.76	5	EPA 300.0	19-Dec-13	20-Dec-13	EE	1330570	X
	Total Organic Carbon	1.08		mg/l	1.00	0.283	1	SM 5310B	18-Dec-13	18-Dec-13	TDD	1330590	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	19-Dec-13	19-Dec-13	CT007	262707A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	41.5		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	[none]

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Sample Identification

MW-42S/20131216

SB82039-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 13:45

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	17.9		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-42S/20131216

SB82039-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 13:45

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	18-Dec-13	19-Dec-13	GMA	1330414	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	7.04		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	10.3		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	99			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	101			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	97			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	97			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			CPA	1330325	

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Sample Identification

MW-42S/20131216

SB82039-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

16-Dec-13 13:45

Received

16-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	26-Dec-13	ARF	1330788	X
7440-39-3	Barium	0.0646		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0256		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0927		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0040		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	54.0		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0343		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.100	R06	mg/l	0.100	0.0039	1	"	27-Dec-13	28-Dec-13	"	1331123	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330531	X
16887-00-6	Chloride	95.7	D, GS1	mg/l	5.00	0.620	5	EPA 300.0	16-Dec-13	17-Dec-13	ELE	1330117	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	26-Dec-13	RLT	1330958	X
14797-55-8	Nitrate as N	9.84	D, GS1	mg/l	0.500	0.105	5	EPA 300.0	16-Dec-13 15:37	17-Dec-13 12:34	ELE	1330117	X
14797-65-0	Nitrite as N	< 0.500	D, R01	mg/l	0.500	0.495	5	"	16-Dec-13 15:37	17-Dec-13 12:34	"	"	X
	Total Dissolved Solids	466		mg/l	5	3	1	SM2540C	18-Dec-13	18-Dec-13	CMB	1330301	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	18-Dec-13	19-Dec-13	BD	1330449	X
14808-79-8	Sulfate as SO4	104	D, GS1	mg/l	5.00	1.76	5	EPA 300.0	16-Dec-13	17-Dec-13	ELE	1330117	X
	Total Organic Carbon	2.14		mg/l	1.00	0.283	1	SM 5310B	18-Dec-13	18-Dec-13	TDD	1330590	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	19-Dec-13	19-Dec-13	CT007	262707A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	19.4		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	[none]

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330414 - SW846 5030 Water MS										
<u>Blank (1330414-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330414 - SW846 5030 Water MS										
<u>Blank (1330414-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	50.2		µg/l	50.0		100		70-130		
Surrogate: Toluene-d8	49.8		µg/l	50.0		100		70-130		
Surrogate: 1,2-Dichloroethane-d4	48.2		µg/l	50.0		96		70-130		
Surrogate: Dibromofluoromethane	48.2		µg/l	50.0		96		70-130		
<u>LCS (1330414-BS1)</u>										
Prepared & Analyzed: 18-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.4		µg/l	20.0		87		70-130		
Acetone	17.5		µg/l	20.0		87		70-130		
Acrylonitrile	16.2		µg/l	20.0		81		70-130		
Benzene	19.2		µg/l	20.0		96		70-130		
Bromobenzene	19.7		µg/l	20.0		98		70-130		
Bromoform	19.3		µg/l	20.0		96		70-130		
Bromochloromethane	18.7		µg/l	20.0		94		70-130		
Bromodichloromethane	18.2		µg/l	20.0		91		70-130		
Bromoform	15.9		µg/l	20.0		80		70-130		
2-Butanone (MEK)	18.4		µg/l	20.0		92		70-130		
n-Butylbenzene	19.1		µg/l	20.0		95		70-130		
sec-Butylbenzene	20.0		µg/l	20.0		100		70-130		
tert-Butylbenzene	19.8		µg/l	20.0		99		70-130		
Carbon disulfide	15.6		µg/l	20.0		78		70-130		
Carbon tetrachloride	16.4		µg/l	20.0		82		70-130		
Chlorobenzene	19.4		µg/l	20.0		97		70-130		
Chloroethane	16.3		µg/l	20.0		81		70-130		
Chloroform	18.4		µg/l	20.0		92		70-130		
Chloromethane	15.7		µg/l	20.0		79		70-130		
2-Chlorotoluene	19.3		µg/l	20.0		97		70-130		
4-Chlorotoluene	19.7		µg/l	20.0		98		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330414 - SW846 5030 Water MS										
<u>LCS (1330414-BS1)</u>										
<u>Prepared & Analyzed: 18-Dec-13</u>										
1,2-Dibromo-3-chloropropane	18.3		µg/l		20.0	91	70-130			
Dibromochloromethane	19.2		µg/l		20.0	96	70-130			
1,2-Dibromoethane (EDB)	19.5		µg/l		20.0	97	70-130			
Dibromomethane	19.6		µg/l		20.0	98	70-130			
1,2-Dichlorobenzene	19.4		µg/l		20.0	97	70-130			
1,3-Dichlorobenzene	18.5		µg/l		20.0	93	70-130			
1,4-Dichlorobenzene	20.2		µg/l		20.0	101	70-130			
Dichlorodifluoromethane (Freon12)	16.8		µg/l		20.0	84	70-130			
1,1-Dichloroethane	18.4		µg/l		20.0	92	70-130			
1,2-Dichloroethane	18.8		µg/l		20.0	94	70-130			
1,1-Dichloroethene	17.7		µg/l		20.0	88	70-130			
cis-1,2-Dichloroethene	19.2		µg/l		20.0	96	70-130			
trans-1,2-Dichloroethene	18.6		µg/l		20.0	93	70-130			
1,2-Dichloropropane	19.0		µg/l		20.0	95	70-130			
1,3-Dichloropropane	19.6		µg/l		20.0	98	70-130			
2,2-Dichloropropane	16.3		µg/l		20.0	81	70-130			
1,1-Dichloropropene	18.3		µg/l		20.0	91	70-130			
cis-1,3-Dichloropropene	18.7		µg/l		20.0	93	70-130			
trans-1,3-Dichloropropene	18.1		µg/l		20.0	90	70-130			
Ethylbenzene	19.3		µg/l		20.0	97	70-130			
Hexachlorobutadiene	18.6		µg/l		20.0	93	70-130			
2-Hexanone (MBK)	19.6		µg/l		20.0	98	70-130			
Isopropylbenzene	19.6		µg/l		20.0	98	70-130			
4-Isopropyltoluene	19.6		µg/l		20.0	98	70-130			
Methyl tert-butyl ether	18.1		µg/l		20.0	90	70-130			
4-Methyl-2-pentanone (MIBK)	19.2		µg/l		20.0	96	70-130			
Methylene chloride	16.1		µg/l		20.0	80	70-130			
Naphthalene	18.4		µg/l		20.0	92	70-130			
n-Propylbenzene	19.8		µg/l		20.0	99	70-130			
Styrene	19.8		µg/l		20.0	99	70-130			
1,1,1,2-Tetrachloroethane	19.2		µg/l		20.0	96	70-130			
1,1,2,2-Tetrachloroethane	20.1		µg/l		20.0	100	70-130			
Tetrachloroethene	19.3		µg/l		20.0	96	70-130			
Toluene	18.8		µg/l		20.0	94	70-130			
1,2,3-Trichlorobenzene	20.0		µg/l		20.0	100	70-130			
1,2,4-Trichlorobenzene	19.4		µg/l		20.0	97	70-130			
1,3,5-Trichlorobenzene	19.0		µg/l		20.0	95	70-130			
1,1,1-Trichloroethane	18.4		µg/l		20.0	92	70-130			
1,1,2-Trichloroethane	19.9		µg/l		20.0	99	70-130			
Trichloroethene	19.3		µg/l		20.0	96	70-130			
Trichlorofluoromethane (Freon 11)	17.5		µg/l		20.0	88	70-130			
1,2,3-Trichloropropane	19.4		µg/l		20.0	97	70-130			
1,2,4-Trimethylbenzene	20.0		µg/l		20.0	100	70-130			
1,3,5-Trimethylbenzene	19.8		µg/l		20.0	99	70-130			
Vinyl chloride	15.3		µg/l		20.0	76	70-130			
m,p-Xylene	38.8		µg/l		40.0	97	70-130			
o-Xylene	19.5		µg/l		20.0	97	70-130			
Tetrahydrofuran	19.5		µg/l		20.0	98	70-130			
Ethyl ether	16.3		µg/l		20.0	81	70-130			
Tert-amyl methyl ether	19.2		µg/l		20.0	96	70-130			
Ethyl tert-butyl ether	18.2		µg/l		20.0	91	70-130			
Di-isopropyl ether	18.7		µg/l		20.0	93	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330414 - SW846 5030 Water MS										
<u>LCS (1330414-BS1)</u>										
Tert-Butanol / butyl alcohol	167		µg/l		200	83	70-130			
1,4-Dioxane	206		µg/l		200	103	70-130			
trans-1,4-Dichloro-2-butene	17.6		µg/l		20.0	88	70-130			
Ethanol	347		µg/l		400	87	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	51.0		µg/l		50.0	102	70-130			
<u>Surrogate: Toluene-d8</u>										
	50.5		µg/l		50.0	101	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	48.6		µg/l		50.0	97	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	50.2		µg/l		50.0	100	70-130			
<u>LCS Dup (1330414-BSD1)</u>										
<u>Prepared & Analyzed: 18-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.5		µg/l		20.0	92	70-130	6	20	
Acetone	17.8		µg/l		20.0	89	70-130	2	20	
Acrylonitrile	17.0		µg/l		20.0	85	70-130	5	20	
Benzene	19.6		µg/l		20.0	98	70-130	2	20	
Bromobenzene	20.3		µg/l		20.0	102	70-130	3	20	
Bromochloromethane	20.7		µg/l		20.0	103	70-130	7	20	
Bromodichloromethane	19.5		µg/l		20.0	98	70-130	4	20	
Bromoform	18.4		µg/l		20.0	92	70-130	1	20	
Bromomethane	16.0		µg/l		20.0	80	70-130	0.8	20	
2-Butanone (MEK)	19.0		µg/l		20.0	95	70-130	3	20	
n-Butylbenzene	20.1		µg/l		20.0	100	70-130	5	20	
sec-Butylbenzene	20.8		µg/l		20.0	104	70-130	4	20	
tert-Butylbenzene	20.7		µg/l		20.0	104	70-130	4	20	
Carbon disulfide	16.5		µg/l		20.0	82	70-130	6	20	
Carbon tetrachloride	17.7		µg/l		20.0	89	70-130	8	20	
Chlorobenzene	19.9		µg/l		20.0	100	70-130	3	20	
Chloroethane	17.0		µg/l		20.0	85	70-130	4	20	
Chloroform	18.9		µg/l		20.0	95	70-130	3	20	
Chloromethane	16.4		µg/l		20.0	82	70-130	4	20	
2-Chlorotoluene	20.4		µg/l		20.0	102	70-130	5	20	
4-Chlorotoluene	20.2		µg/l		20.0	101	70-130	3	20	
1,2-Dibromo-3-chloropropane	18.0		µg/l		20.0	90	70-130	2	20	
Dibromochloromethane	19.7		µg/l		20.0	99	70-130	3	20	
1,2-Dibromoethane (EDB)	20.2		µg/l		20.0	101	70-130	4	20	
Dibromomethane	20.1		µg/l		20.0	101	70-130	2	20	
1,2-Dichlorobenzene	20.1		µg/l		20.0	101	70-130	4	20	
1,3-Dichlorobenzene	20.8		µg/l		20.0	104	70-130	12	20	
1,4-Dichlorobenzene	19.6		µg/l		20.0	98	70-130	3	20	
Dichlorodifluoromethane (Freon12)	17.6		µg/l		20.0	88	70-130	5	20	
1,1-Dichloroethane	19.1		µg/l		20.0	95	70-130	3	20	
1,2-Dichloroethane	19.4		µg/l		20.0	97	70-130	3	20	
1,1-Dichloroethene	18.4		µg/l		20.0	92	70-130	4	20	
cis-1,2-Dichloroethene	19.6		µg/l		20.0	98	70-130	3	20	
trans-1,2-Dichloroethene	19.6		µg/l		20.0	98	70-130	5	20	
1,2-Dichloropropane	19.7		µg/l		20.0	98	70-130	3	20	
1,3-Dichloropropane	20.3		µg/l		20.0	101	70-130	3	20	
2,2-Dichloropropane	16.8		µg/l		20.0	84	70-130	3	20	
1,1-Dichloropropene	19.5		µg/l		20.0	97	70-130	7	20	
cis-1,3-Dichloropropene	18.8		µg/l		20.0	94	70-130	0.9	20	
trans-1,3-Dichloropropene	18.8		µg/l		20.0	94	70-130	4	20	
Ethylbenzene	19.8		µg/l		20.0	99	70-130	3	20	
Hexachlorobutadiene	19.2		µg/l		20.0	96	70-130	3	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330414 - SW846 5030 Water MS										
<u>LCS Dup (1330414-BSD1)</u>										
<u>Prepared & Analyzed: 18-Dec-13</u>										
2-Hexanone (MBK)	20.1		µg/l		20.0	101	70-130	3	20	
Isopropylbenzene	20.1		µg/l		20.0	101	70-130	2	20	
4-Isopropyltoluene	20.4		µg/l		20.0	102	70-130	4	20	
Methyl tert-butyl ether	18.6		µg/l		20.0	93	70-130	3	20	
4-Methyl-2-pentanone (MIBK)	20.0		µg/l		20.0	100	70-130	4	20	
Methylene chloride	16.3		µg/l		20.0	82	70-130	2	20	
Naphthalene	19.2		µg/l		20.0	96	70-130	4	20	
n-Propylbenzene	20.6		µg/l		20.0	103	70-130	4	20	
Styrene	20.6		µg/l		20.0	103	70-130	4	20	
1,1,1,2-Tetrachloroethane	19.4		µg/l		20.0	97	70-130	1	20	
1,1,2,2-Tetrachloroethane	20.6		µg/l		20.0	103	70-130	3	20	
Tetrachloroethene	20.4		µg/l		20.0	102	70-130	6	20	
Toluene	19.4		µg/l		20.0	97	70-130	3	20	
1,2,3-Trichlorobenzene	21.0		µg/l		20.0	105	70-130	5	20	
1,2,4-Trichlorobenzene	20.5		µg/l		20.0	102	70-130	6	20	
1,3,5-Trichlorobenzene	20.2		µg/l		20.0	101	70-130	6	20	
1,1,1-Trichloroethane	19.1		µg/l		20.0	95	70-130	4	20	
1,1,2-Trichloroethane	20.1		µg/l		20.0	101	70-130	1	20	
Trichloroethene	19.9		µg/l		20.0	99	70-130	3	20	
Trichlorofluoromethane (Freon 11)	18.1		µg/l		20.0	91	70-130	4	20	
1,2,3-Trichloropropane	19.2		µg/l		20.0	96	70-130	0.9	20	
1,2,4-Trimethylbenzene	20.7		µg/l		20.0	104	70-130	4	20	
1,3,5-Trimethylbenzene	20.6		µg/l		20.0	103	70-130	4	20	
Vinyl chloride	16.4		µg/l		20.0	82	70-130	7	20	
m,p-Xylene	40.8		µg/l		40.0	102	70-130	5	20	
o-Xylene	20.5		µg/l		20.0	103	70-130	5	20	
Tetrahydrofuran	19.4		µg/l		20.0	97	70-130	0.6	20	
Ethyl ether	17.2		µg/l		20.0	86	70-130	5	20	
Tert-amyl methyl ether	19.1		µg/l		20.0	96	70-130	0.7	20	
Ethyl tert-butyl ether	18.3		µg/l		20.0	92	70-130	0.9	20	
Di-isopropyl ether	19.3		µg/l		20.0	96	70-130	3	20	
Tert-Butanol / butyl alcohol	169		µg/l		200	84	70-130	1	20	
1,4-Dioxane	198		µg/l		200	99	70-130	4	20	
trans-1,4-Dichloro-2-butene	17.0		µg/l		20.0	85	70-130	4	20	
Ethanol	357		µg/l		400	89	70-130	3	20	
Surrogate: 4-Bromofluorobenzene	50.7		µg/l		50.0	101	70-130			
Surrogate: Toluene-d8	50.1		µg/l		50.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	47.8		µg/l		50.0	96	70-130			
Surrogate: Dibromofluoromethane	49.7		µg/l		50.0	99	70-130			

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330788 - SW846 3005A										
<u>Blank (1330788-BLK1)</u>										
Manganese	< 0.0020		mg/l	0.0020		Prepared & Analyzed: 26-Dec-13				
Iron	< 0.0150		mg/l	0.0150						
Sodium	< 0.250		mg/l	0.250						
Chromium	< 0.0050		mg/l	0.0050						
Copper	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Nickel	< 0.0050		mg/l	0.0050						
Lead	< 0.0075		mg/l	0.0075						
Barium	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
<u>LCS (1330788-BS1)</u>										
Sodium	6.59		mg/l	0.250	6.25	105	85-115			
Manganese	1.37		mg/l	0.0020	1.25	110	85-115			
Iron	1.38		mg/l	0.0150	1.25	111	85-115			
Nickel	1.28		mg/l	0.0050	1.25	102	85-115			
Copper	1.32		mg/l	0.0050	1.25	106	85-115			
Chromium	1.34		mg/l	0.0050	1.25	107	85-115			
Lead	1.25		mg/l	0.0075	1.25	100	85-115			
Barium	1.35		mg/l	0.0050	1.25	108	85-115			
Arsenic	1.30		mg/l	0.0040	1.25	104	85-115			
Cadmium	1.30		mg/l	0.0025	1.25	104	85-115			
<u>LCS Dup (1330788-BSD1)</u>										
Iron	1.37		mg/l	0.0150	1.25	110	85-115	0.8	20	
Manganese	1.35		mg/l	0.0020	1.25	108	85-115	2	20	
Sodium	6.54		mg/l	0.250	6.25	105	85-115	0.8	20	
Copper	1.31		mg/l	0.0050	1.25	105	85-115	1	20	
Nickel	1.30		mg/l	0.0050	1.25	104	85-115	1	20	
Lead	1.25		mg/l	0.0075	1.25	100	85-115	0.4	20	
Chromium	1.31		mg/l	0.0050	1.25	105	85-115	2	20	
Cadmium	1.30		mg/l	0.0025	1.25	104	85-115	0.1	20	
Barium	1.32		mg/l	0.0050	1.25	105	85-115	3	20	
Arsenic	1.29		mg/l	0.0040	1.25	103	85-115	0.7	20	
<u>Duplicate (1330788-DUP1)</u>										
					Source: SB82039-02	Prepared & Analyzed: 26-Dec-13				
Iron	0.0899		mg/l	0.0150		0.0818		9	20	
Manganese	0.0122		mg/l	0.0020		0.0130		6	20	
Sodium	43.3		mg/l	0.250		43.7		0.9	20	
Lead	< 0.0075		mg/l	0.0075		BRL				
Barium	0.0201		mg/l	0.0050		0.0204		2	20	
Cadmium	0.0008	J	mg/l	0.0025		0.0009				
Chromium	0.0015	J	mg/l	0.0050		0.0016		3	20	
Copper	0.0038	J	mg/l	0.0050		0.0042		9	20	
Nickel	0.0112		mg/l	0.0050		0.0110		2	20	
Arsenic	0.0020	J	mg/l	0.0040		BRL				
<u>Matrix Spike (1330788-MS1)</u>										
					Source: SB82039-03	Prepared & Analyzed: 26-Dec-13				
Sodium	79.0		mg/l	0.250	6.25	73.2	93	75-125		
Manganese	3.55		mg/l	0.0020	1.25	2.34	97	75-125		
Iron	3.04		mg/l	0.0150	1.25	1.59	116	75-125		
Nickel	1.22		mg/l	0.0050	1.25	0.0092	97	75-125		
Lead	1.18		mg/l	0.0075	1.25	BRL	94	75-125		
Copper	1.29		mg/l	0.0050	1.25	0.0092	102	75-125		
Cadmium	1.23		mg/l	0.0025	1.25	BRL	99	75-125		

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330788 - SW846 3005A										
<u>Matrix Spike (1330788-MS1)</u>				<u>Source: SB82039-03</u>	<u>Prepared & Analyzed: 26-Dec-13</u>					
Barium	1.43		mg/l	0.0050	1.25	0.120	105	75-125		
Arsenic	1.30		mg/l	0.0040	1.25	BRL	104	75-125		
Chromium	1.27		mg/l	0.0050	1.25	0.0018	101	75-125		
<u>Matrix Spike Dup (1330788-MSD1)</u>				<u>Source: SB82039-03</u>	<u>Prepared & Analyzed: 26-Dec-13</u>					
Sodium	77.4	QM2	mg/l	0.250	6.25	73.2	68	75-125	2	20
Manganese	3.50		mg/l	0.0020	1.25	2.34	93	75-125	1	20
Iron	2.98		mg/l	0.0150	1.25	1.59	111	75-125	2	20
Arsenic	1.29		mg/l	0.0040	1.25	BRL	103	75-125	1	20
Copper	1.27		mg/l	0.0050	1.25	0.0092	101	75-125	1	20
Chromium	1.25		mg/l	0.0050	1.25	0.0018	100	75-125	1	20
Lead	1.17		mg/l	0.0075	1.25	BRL	93	75-125	1	20
Barium	1.40		mg/l	0.0050	1.25	0.120	102	75-125	2	20
Nickel	1.21		mg/l	0.0050	1.25	0.0092	96	75-125	1	20
Cadmium	1.22		mg/l	0.0025	1.25	BRL	98	75-125	1	20
<u>Post Spike (1330788-PS1)</u>				<u>Source: SB82039-03</u>	<u>Prepared & Analyzed: 26-Dec-13</u>					
Iron	3.03		mg/l	0.0150	1.25	1.59	115	80-120		
Manganese	3.52		mg/l	0.0020	1.25	2.34	95	80-120		
Sodium	78.4		mg/l	0.250	6.25	73.2	83	80-120		
Arsenic	1.30		mg/l	0.0040	1.25	BRL	104	80-120		
Barium	1.42		mg/l	0.0050	1.25	0.120	104	80-120		
Cadmium	1.23		mg/l	0.0025	1.25	BRL	98	80-120		
Chromium	1.27		mg/l	0.0050	1.25	0.0018	101	80-120		
Copper	1.29		mg/l	0.0050	1.25	0.0092	103	80-120		
Lead	1.18		mg/l	0.0075	1.25	BRL	94	80-120		
Nickel	1.21		mg/l	0.0050	1.25	0.0092	96	80-120		
Batch 1331123 - SW846 3005A										
<u>Blank (1331123-BLK1)</u>					<u>Prepared & Analyzed: 27-Dec-13</u>					
Zinc	< 0.100		mg/l	0.100						
<u>LCS (1331123-BS1)</u>					<u>Prepared & Analyzed: 27-Dec-13</u>					
Zinc	2.44		mg/l	0.100	2.50		98	85-115		
<u>LCS Dup (1331123-BSD1)</u>					<u>Prepared & Analyzed: 27-Dec-13</u>					
Zinc	2.41		mg/l	0.100	2.50		96	85-115	1	20
<u>Duplicate (1331123-DUP1)</u>				<u>Source: SB82039-05</u>	<u>Prepared & Analyzed: 27-Dec-13</u>					
Zinc	0.0157	J,R06	mg/l	0.100		0.0132			17	20
<u>Matrix Spike (1331123-MS1)</u>				<u>Source: SB82039-05</u>	<u>Prepared & Analyzed: 27-Dec-13</u>					
Zinc	2.49		mg/l	0.100	2.50	0.0132	99	75-125		
<u>Matrix Spike Dup (1331123-MSD1)</u>				<u>Source: SB82039-05</u>	<u>Prepared & Analyzed: 27-Dec-13</u>					
Zinc	2.45		mg/l	0.100	2.50	0.0132	98	75-125	2	20
<u>Post Spike (1331123-PS1)</u>				<u>Source: SB82039-05</u>	<u>Prepared: 27-Dec-13 Analyzed: 28-Dec-13</u>					
Zinc	2.46		mg/l	0.100	2.50	0.0132	98	80-120		

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330117 - General Preparation										
<u>Blank (1330117-BLK1)</u>										
Nitrite as N	< 0.100		mg/l	0.100				Prepared: 15-Dec-13 Analyzed: 16-Dec-13		
Chloride	< 1.00		mg/l	1.00						
Sulfate as SO4	< 1.00		mg/l	1.00						
Nitrate as N	< 0.100		mg/l	0.100						
<u>LCS (1330117-BS1)</u>										
Nitrite as N	2.12		mg/l	0.100	2.00		106	90-110		
Sulfate as SO4	20.0		mg/l	1.00	20.0		100	90-110		
Chloride	20.7		mg/l	1.00	20.0		104	90-110		
Nitrate as N	2.04		mg/l	0.100	2.00		102	90-110		
<u>Reference (1330117-SRM1)</u>										
Chloride	27.1		mg/l	1.00	25.0		108	90-110		
Nitrite as N	2.80	QM9	mg/l	0.100	2.50		112	90-110		
Sulfate as SO4	26.5		mg/l	1.00	25.0		106	90-110		
Nitrate as N	2.80	QM9	mg/l	0.100	2.50		112	90-110		
Batch 1330301 - General Preparation										
<u>Blank (1330301-BLK1)</u>										
Total Dissolved Solids	< 5		mg/l	5				Prepared: 17-Dec-13 Analyzed: 18-Dec-13		
<u>LCS (1330301-BS1)</u>										
Total Dissolved Solids	1040		mg/l	10	1000		104	90-110		
Batch 1330425 - General Preparation										
<u>Blank (1330425-BLK1)</u>										
Chloride	< 1.00		mg/l	1.00				Prepared & Analyzed: 18-Dec-13		
<u>LCS (1330425-BS1)</u>										
Chloride	19.6		mg/l	1.00	20.0		98	90-110		
<u>Reference (1330425-SRM1)</u>										
Chloride	24.0		mg/l	1.00	25.0		96	90-110		
Batch 1330449 - General Preparation										
<u>Blank (1330449-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0				Prepared: 18-Dec-13 Analyzed: 19-Dec-13		
<u>LCS (1330449-BS1)</u>										
Total Suspended Solids	94.0		mg/l	10.0	100		94	90-110		
<u>Duplicate (1330449-DUP2)</u>										
Total Suspended Solids	5.0		mg/l	5.0		5.0			0	20
Batch 1330531 - General Preparation										
<u>Blank (1330531-BLK1)</u>										
Ammonia as N	< 0.100		mg/l	0.100				Prepared: 19-Dec-13 Analyzed: 21-Dec-13		
<u>LCS (1330531-BS1)</u>										
Ammonia as N	2.29		mg/l	0.100	2.50		92	90-110		
<u>Reference (1330531-SRM1)</u>										
Ammonia as N	0.985		mg/l	0.100	1.04		95	84-116		
Batch 1330570 - General Preparation										
<u>Blank (1330570-BLK1)</u>										
Sulfate as SO4	< 1.00		mg/l	1.00				Prepared: 19-Dec-13 Analyzed: 20-Dec-13		
<u>LCS (1330570-BS1)</u>										
Sulfate as SO4	19.3		mg/l	1.00	20.0		96	90-110		
<u>Reference (1330570-SRM1)</u>										
Sulfate as SO4	25.1		mg/l	1.00	25.0		101	90-110		
Batch 1330590 - General Preparation										
<u>Blank (1330590-BLK1)</u>										
Prepared & Analyzed: 18-Dec-13										

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330590 - General Preparation										
<u>Blank (1330590-BLK1)</u>										
Total Organic Carbon	< 1.00		mg/l	1.00						
<u>LCS (1330590-BS1)</u>										
Total Organic Carbon	14.3		mg/l	1.00	15.0	96		85-115		
<u>Calibration Blank (1330590-CCB1)</u>										
Total Organic Carbon	0.361		mg/l							
<u>Calibration Blank (1330590-CCB2)</u>										
Total Organic Carbon	0.356		mg/l							
<u>Calibration Blank (1330590-CCB3)</u>										
Total Organic Carbon	0.366		mg/l							
<u>Calibration Check (1330590-CCV1)</u>										
Total Organic Carbon	4.58		mg/l	1.00	5.00	92		85-115		
<u>Calibration Check (1330590-CCV2)</u>										
Total Organic Carbon	4.62		mg/l	1.00	5.00	92		85-115		
<u>Calibration Check (1330590-CCV3)</u>										
Total Organic Carbon	4.97		mg/l	1.00	5.00	99		85-115		
<u>Reference (1330590-SRM1)</u>										
Total Organic Carbon	7.50		mg/l	1.00	8.20	91		87-113		
Batch 1330696 - General Preparation										
<u>Blank (1330696-BLK1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>Blank (1330696-BLK2)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>LCS (1330696-BS1)</u>										
Cyanide (total)	0.287		mg/l	0.00500	0.300	96		90-110		
<u>LCS (1330696-BS2)</u>										
Cyanide (total)	0.308		mg/l	0.00500	0.300	103		90-110		
<u>Calibration Blank (1330696-CCB1)</u>										
Cyanide (total)	-0.000325		mg/l							
<u>Calibration Blank (1330696-CCB2)</u>										
Cyanide (total)	-0.000270		mg/l							
<u>Calibration Blank (1330696-CCB3)</u>										
Cyanide (total)	-0.000466		mg/l							
<u>Calibration Blank (1330696-CCB4)</u>										
Cyanide (total)	-0.000594		mg/l							
<u>Calibration Blank (1330696-CCB5)</u>										
Cyanide (total)	-0.000565		mg/l							
<u>Calibration Blank (1330696-CCB6)</u>										
Cyanide (total)	-0.000348		mg/l							
<u>Calibration Check (1330696-CCV1)</u>										
Cyanide (total)	0.303		mg/l	0.00500	0.300	101		90-110		
<u>Calibration Check (1330696-CCV2)</u>										
Cyanide (total)	0.304		mg/l	0.00500	0.300	101		90-110		
<u>Calibration Check (1330696-CCV3)</u>										
Cyanide (total)	0.304		mg/l	0.00500	0.300	101		90-110		
<u>Calibration Check (1330696-CCV4)</u>										
Cyanide (total)	0.303		mg/l	0.00500	0.300	101		90-110		
<u>Calibration Check (1330696-CCV5)</u>										
Cyanide (total)	0.306		mg/l	0.00500	0.300	102		90-110		
<u>Calibration Check (1330696-CCV6)</u>										

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330696 - General Preparation										
<u>Calibration Check (1330696-CCV6)</u>										
Cyanide (total)	0.300		mg/l	0.00500	0.300	100	90-110			
<u>Duplicate (1330696-DUP1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500	BRL					20
<u>Matrix Spike (1330696-MS1)</u>										
Cyanide (total)	0.297		mg/l	0.00500	0.300	BRL	99	90-110		
<u>Matrix Spike Dup (1330696-MSD1)</u>										
Cyanide (total)	0.311		mg/l	0.00500	0.300	BRL	104	90-110	5	20
<u>Reference (1330696-SRM1)</u>										
Cyanide (total)	0.263		mg/l	0.00500	0.336	78	0-200			
Batch 1330958 - General Preparation										
<u>Blank (1330958-BLK1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>Blank (1330958-BLK2)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>LCS (1330958-BS1)</u>										
Cyanide (total)	0.298		mg/l	0.00500	0.300	99	90-110			
<u>LCS (1330958-BS2)</u>										
Cyanide (total)	0.308		mg/l	0.00500	0.300	103	90-110			
<u>Reference (1330958-SRM1)</u>										
Cyanide (total)	0.144		mg/l	0.00500	0.168	86	74.9-125			

This laboratory report is not valid without an authorized signature on the cover page.

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 262707A - 262707										
<u>BLK (BF89633-BLK)</u>						<u>Source: SB82039-02</u>		<u>Prepared & Analyzed: 19-Dec-13</u>		
Phenolics	< 0.015		mg/L	0.015					-	
<u>DUP (BF89633-DUP)</u>						<u>Source: SB82039-02</u>		<u>Prepared & Analyzed: 19-Dec-13</u>		
Phenolics	ND		mg/L				BRL	-	0	20
<u>LCS (BF89633-LCS)</u>						<u>Source: SB82039-02</u>		<u>Prepared & Analyzed: 19-Dec-13</u>		
Phenolics	ND		mg/L				100	70-130		20
<u>MS (BF89633-MS)</u>						<u>Source: SB82039-02</u>		<u>Prepared & Analyzed: 19-Dec-13</u>		
Phenolics	ND		mg/L				96.0	70-130		20

This laboratory report is not valid without an authorized signature on the cover page.

Notes and Definitions

D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
R01	The Reporting Limit has been raised to account for matrix interference.
R06	IMRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor
Kimberly Wisk
Nicole Leja



SB 82039

by

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- Standard TAT - 7 to 10 business days
 Rush TAT - Date Needed: _____
 · All TATs subject to laboratory approval.
 · Min. 24-hour notification needed for rushes.
 · Samples disposed of after 60 days unless otherwise instructed.

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Invoice To: Kris Sibinya
Envirite Corporation
PO Box 591
Chappaqua NY 10514

Telephone #: 603-703-5534
 Project Mgr: John Noble

Project No.: 08-14218G2Site Name: Envirite RCRA LandfillLocation: Thomaston State: CTSampler(s): Luke C / John V

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= _____ 12= _____

2 10 5 4 3

QA/QC Reporting Notes:
 * additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air

X1= Trip Blank X2= _____ X3= _____

Containers:

Analyses:

MA DEP MCP CAM Report: Yes No CT DPH RCP Report: Yes No

QA/QC Reporting Level

 Standard No QC DQA* NY ASP A* NY ASP B* NJ Reduced* NJ Full* TIER II* TIER IV* Other CT RCP CT RSRS

State-specific reporting standards:

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs	TOC	Total Cyanide	Total Metals As, Cd, Cu, Pb, Zn	Ammonia as N, Total Phenolics	Nitrite as N, Nitrate as N	Chloride, Conductivity	Sulfate	TDS, TSS
82032-1	TR-20131216	12-16-13	0900	G	X1	1			X									
02	MW-62B/20131216		0920	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	
03	MW-62/20131216		0940	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	
04	MW-415/20131216		1215	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	
05	MW-41D/20131216		1155	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	
06	MW-41B/20131216		1350	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	
07	MW-41S/20131216	12-16-13	1345	G	GW	5	1	5	X	X	X	X	X	X	X	X	X	

04/1/14 TR-20131216
JUL 12 2014

Relinquished by:

Luke C

Received by:

John V

Date:

12-16-13

Time:

2:50

Temp°C

 EDD Format Enviro Equis 4-File E-mail to jnobles@envirocorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

SB 82039

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

CHAIN OF CUSTODY RECORD

Page 1 of 1

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Invoice To: Kris Sibbinga
Envirite Corporation
PO Box 591
Chappaqua NY 10514

Telephone #: 603-703-5534
Project Mgr. John Noble

Project No.: 08-14218G2

Site Name: Envirite RCRA Landfill

Location: Thomaston State: CT

Sampler(s): Luke C / John U

List preservative code below:

2 10 5 4 3 ✓ 12/17

QA/QC Reporting Notes:

* additional charges may apply

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air

X1= Trip Blank X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	VOCs 8260	TOC	Total Cyanide	Analyses:				MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input type="checkbox"/>	CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
82039-1	TB-20131216	12-16-13	0900	G	X1	1				X			*	Ba, Cr, Fe, Mn,				
02	MW-62B/20131216		0920	GW	5	1	5	X	X	X	X	X	X	X	X	X	X	Na and N, also added
03	MW-62/20131216		0940		1	5	1	5	X	X	X	X	X	X	X	X	X	perchlorate present
04	MW-41S/20131216	(12)	1215	(12)	5	1	5	X	X	X	X	X	X	X	X	X	X	1 Ba 12/17
05	MW-41D/20131216	(12)	1155	(12)	5	1	5	X	X	X	X	X	X	X	X	X	X	conductivity cancelled
06	MW-41B/20131216	↓	1350	↓	5	1	5	X	X	X	X	X	X	X	X	X	X	perchlorate on 12/17
07	MW-41S/20131216	12-16-13	1345	G	GW	5	1	5	X	X	X	X	X	X	X	X	0.4 / -1 / -0.01 R01	
																		JULY 12/16

Relinquished by:

Received by:

Date:

12/16/13

Time:

2:50

Temp°C

16.33

EDD Format Environ Equis 4-File

E-mail to jnoble@environcorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

Report Date:
31-Dec-13 14:11

- Final Report
 Re-Issued Report
 Revised Report



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Laboratory Report

ENVIRON International Corporation
3 Carlisle Rd
Westford, MA 01886
Attn: John Noble

Project: Envirite RCRA Landfill - Thomaston, CT
Project #: 08-14218G2

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB82197-01	TB-20131218	Trip Blank	18-Dec-13 08:00	18-Dec-13 17:11
SB82197-02	MW-50S/20131218	Ground Water	18-Dec-13 08:30	18-Dec-13 17:11
SB82197-03	MW-53D/20131218	Ground Water	18-Dec-13 08:50	18-Dec-13 17:11
SB82197-04	MW-51B/20131218	Ground Water	18-Dec-13 11:30	18-Dec-13 17:11
SB82197-05	MW-51D/20131218	Ground Water	18-Dec-13 11:30	18-Dec-13 17:11
SB82197-06	MW-42B/20131218	Ground Water	18-Dec-13 14:20	18-Dec-13 17:11

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director



Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 53 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Project Location: Envirite RCRA Landfill - Thomaston, CT

Sampling Date(s):

12/18/2013

RCP Methods Used:

EPA 335.4 / SW846 9012B

SW846 6010C

SW846 8260C

Client: ENVIRON International Corporation - Westford, MA

Project Number: 08-14218G2

Laboratory Sample ID(s):

SB82197-01 through SB82197-06

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes	No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes	No
1B	<i>VPH and EPH methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes	No
3	Were samples received at an appropriate temperature?	<input checked="" type="checkbox"/> Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	<input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes Yes	<input checked="" type="checkbox"/> No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes	<input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja
 Laboratory Director
 Date: 12/31/2013

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received -0.7 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

According to CTDEP RCP Quality Assurance and Quality Control Requirements for VOCs by method 8260, SW-846 version 1, 7/28/05 Table 1A, recovery for some VOC analytes have been deemed potentially difficult.

For this work order, the reporting limits have not been referenced or specified.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 300.0

Samples:

SB82197-02 *MW-50S/20131218*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82197-03 *MW-53D/20131218*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82197-04 *MW-51B/20131218*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82197-05 *MW-51D/20131218*

This laboratory report is not valid without an authorized signature on the cover page.

EPA 300.0

Samples:

SB82197-05 *MW-51D/20131218*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82197-06 *MW-42B/20131218*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sulfate as SO₄

SW846 6010C

Spikes:

1330961-MS1 *Source: SB82197-02*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

1330961-MSD1 *Source: SB82197-02*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Manganese

1330961-PS1 *Source: SB82197-02*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Manganese

Samples:

SB82197-02 *MW-50S/20131218*

IMRL raised to correlate to batch QC reporting limits.

Sodium
Zinc

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Manganese

SB82197-03 *MW-53D/20131218*

IMRL raised to correlate to batch QC reporting limits.

Sodium
Zinc

SW846 6010C

Samples:

SB82197-03 MW-53D/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Manganese

SB82197-04 MW-51B/20131218

IMRL raised to correlate to batch QC reporting limits.

Sodium

Zinc

SB82197-05 MW-51D/20131218

IMRL raised to correlate to batch QC reporting limits.

Sodium

Zinc

SB82197-06 MW-42B/20131218

IMRL raised to correlate to batch QC reporting limits.

Sodium

Zinc

SW846 8260C

Calibration:

1312006

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trichlorobenzene
1,3,5-Trimethylbenzene
2-Hexanone (MBK)
4-Isopropyltoluene
Naphthalene
n-Butylbenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

This affected the following samples:

1330666-BLK1
1330666-BS1
1330666-BSD1
1330666-MS1
1330666-MSD1
MW-42B/20131218
MW-50S/20131218
MW-51B/20131218
MW-51D/20131218
MW-53D/20131218
S314694-ICV1
S315483-CCV1
TB-20131218

1312086

SW846 8260C

Calibration:

1312086

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2-Trichloroethane
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane (EDB)
1,2-Dichloroethane
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Bromodichloromethane
Bromoform
Carbon disulfide
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Ethanol
Tert-Butanol / butyl alcohol
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene

This affected the following samples:

1330918-BLK1
1330918-BS1
1330918-BSD1
MW-50S/20131218
MW-51B/20131218
MW-51D/20131218
MW-53D/20131218
S315629-ICV1
S315641-CCV1

Laboratory Control Samples:

1330666 BS/BSD

Bromoform percent recoveries (157/158) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-42B/20131218
MW-50S/20131218
MW-51B/20131218
MW-51D/20131218
MW-53D/20131218
TB-20131218

Dibromochloromethane percent recoveries (136/131) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-42B/20131218
MW-50S/20131218
MW-51B/20131218
MW-51D/20131218
MW-53D/20131218
TB-20131218

1330918 BSD

This laboratory report is not valid without an authorized signature on the cover page.

SW846 8260C

Laboratory Control Samples:

1330918 BSD

1,4-Dioxane RPD 41% (20%) is outside individual acceptance criteria.

Spikes:

1330666-MS1 *Source: SB82197-02*

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

Bromoform

Dibromochloromethane

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,2-Dibromo-3-chloropropane

This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.

cis-1,2-Dichloroethene

1330666-MSD1 *Source: SB82197-02*

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

Bromoform

Dibromochloromethane

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,2-Dibromo-3-chloropropane

This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.

cis-1,2-Dichloroethene

Samples:

S315483-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1,2-Tetrachloroethane (26.3%)

1,2-Dibromo-3-chloropropane (32.3%)

Bromoform (59.9%)

Carbon disulfide (21.0%)

Dibromochloromethane (36.9%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Bromomethane (-28.6%)

SW846 8260C

Samples:

S315483-CCV1

This affected the following samples:

1330666-BLK1
1330666-BS1
1330666-BSD1
1330666-MS1
1330666-MSD1
MW-42B/20131218
MW-50S/20131218
MW-51B/20131218
MW-51D/20131218
MW-53D/20131218
TB-20131218

S315641-CCV1

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Acetone (20.4%)
Ethanol (27.0%)

This affected the following samples:

1330918-BLK1
1330918-BS1
1330918-BSD1
MW-50S/20131218
MW-51B/20131218
MW-51D/20131218
MW-53D/20131218

SB82197-02RE1 MW-50S/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82197-03RE1 MW-53D/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82197-04RE1 MW-51B/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82197-05RE1 MW-51D/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sample Acceptance Check Form

Client: ENVIRON International Corporation - Westford, MA
Project: Envirite RCRA Landfill - Thomaston, CT / 08-14218G2
Work Order: SB82197
Sample(s) received on: 12/18/2013
Received by: Vickie Knowles

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
1. Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were samples refrigerated upon transfer to laboratory representative?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

TB-20131218

SB82197-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

18-Dec-13 08:00

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

TB-20131218

SB82197-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

18-Dec-13 08:00

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	93	70-130 %										
2037-26-5	Toluene-d8	98	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	112	70-130 %										
1868-53-7	Dibromofluoromethane	113	70-130 %										

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Sample Identification

MW-50S/20131218

SB82197-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	1.22		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	176	E	µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-50S/20131218

SB82197-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:30

Received

18-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	52.4	E	µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	85.6	E	µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	4.89		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92	70-130 %										
2037-26-5	Toluene-d8	96	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	107	70-130 %										
1868-53-7	Dibromofluoromethane	112	70-130 %										

Re-analysis of Volatile Organic Compounds by SW846

GS1

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-50S/20131218

SB82197-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
67-64-1	Acetone	< 290	D	µg/l	290	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	141	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X

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Sample Identification

MW-50S/20131218

SB82197-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	24.4	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	52.4	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	4-Bromo- <i>o</i> -fluorobenzene	95			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	96			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	100			70-130 %			"	"	"	"	"	
1868-53-7	Dibromo- <i>o</i> -fluoromethane	100			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													

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Sample Identification

MW-50S/20131218

SB82197-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:30

Received

18-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			BJW	1330591	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	27-Dec-13	ARF	1330961	X
7440-39-3	Barium	0.101		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0604		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	6.82	GS1, D	mg/l	0.0100	0.0058	5	"	"	31-Dec-13	"	"	X
7440-23-5	Sodium	109	R06	mg/l	5.00	0.0325	1	"	"	27-Dec-13	"	"	X
7440-02-0	Nickel	0.0118		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0782	R06	mg/l	0.0485	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	0.473		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330534	X
16887-00-6	Chloride	200	GS1, D	mg/l	10.0	1.24	10	EPA 300.0	18-Dec-13	18-Dec-13	ELE	1330469	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	27-Dec-13	RLT	1331013	X
14797-55-8	Nitrate as N	20.9	GS1, D	mg/l	1.00	0.210	10	EPA 300.0	18-Dec-13 16:14	18-Dec-13 22:17	ELE	1330469	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	18-Dec-13 16:14	18-Dec-13 21:56	"	"	X
	Total Dissolved Solids	885		mg/l	5	3	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	19-Dec-13	20-Dec-13	CMB	1330547	X
14808-79-8	Sulfate as SO4	272	GS1, D	mg/l	10.0	3.53	10	EPA 300.0	18-Dec-13	18-Dec-13	ELE	1330469	X
	Total Organic Carbon	3.40		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	23-Dec-13	23-Dec-13	PH-06	262947A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	137		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	['none']

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Sample Identification

MW-53D/20131218

SB82197-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:50

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	1.25		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	2.86		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	498	E	µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	1.90		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-53D/20131218

SB82197-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:50

Received

18-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	136	E	µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	238	E	µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	33.5		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92	70-130 %										
2037-26-5	Toluene-d8	96	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	107	70-130 %										
1868-53-7	Dibromofluoromethane	108	70-130 %										

Re-analysis of Volatile Organic Compounds by SW846

GS1

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-53D/20131218

SB82197-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 08:50

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18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 20.0	D	µg/l	20.0	12.9	20	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
67-64-1	Acetone	< 200	D	µg/l	200	51.2	20	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 10.0	D	µg/l	10.0	9.50	20	"	"	"	"	"	X
71-43-2	Benzene	< 20.0	D	µg/l	20.0	13.4	20	"	"	"	"	"	X
108-86-1	Bromobenzene	< 20.0	D	µg/l	20.0	14.4	20	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 20.0	D	µg/l	20.0	14.2	20	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 10.0	D	µg/l	10.0	9.58	20	"	"	"	"	"	X
75-25-2	Bromoform	< 20.0	D	µg/l	20.0	12.1	20	"	"	"	"	"	X
74-83-9	Bromomethane	< 40.0	D	µg/l	40.0	22.8	20	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 200	D	µg/l	200	38.7	20	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 20.0	D	µg/l	20.0	11.2	20	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 20.0	D	µg/l	20.0	16.4	20	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 20.0	D	µg/l	20.0	14.9	20	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 40.0	D	µg/l	40.0	25.6	20	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 20.0	D	µg/l	20.0	11.0	20	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 20.0	D	µg/l	20.0	13.1	20	"	"	"	"	"	X
75-00-3	Chloroethane	< 40.0	D	µg/l	40.0	20.0	20	"	"	"	"	"	X
67-66-3	Chloroform	< 20.0	D	µg/l	20.0	13.8	20	"	"	"	"	"	X
74-87-3	Chloromethane	< 40.0	D	µg/l	40.0	29.5	20	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 20.0	D	µg/l	20.0	15.8	20	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 20.0	D	µg/l	20.0	14.6	20	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 40.0	D	µg/l	40.0	24.0	20	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 10.0	D	µg/l	10.0	6.86	20	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 10.0	D	µg/l	10.0	7.22	20	"	"	"	"	"	X
74-95-3	Dibromomethane	< 20.0	D	µg/l	20.0	13.3	20	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 20.0	D	µg/l	20.0	13.4	20	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 20.0	D	µg/l	20.0	14.2	20	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 20.0	D	µg/l	20.0	12.5	20	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 40.0	D	µg/l	40.0	8.94	20	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 20.0	D	µg/l	20.0	13.6	20	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 20.0	D	µg/l	20.0	15.6	20	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 20.0	D	µg/l	20.0	9.76	20	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	521	D	µg/l	20.0	14.3	20	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 20.0	D	µg/l	20.0	16.6	20	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 20.0	D	µg/l	20.0	15.4	20	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 20.0	D	µg/l	20.0	16.1	20	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 20.0	D	µg/l	20.0	17.4	20	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 20.0	D	µg/l	20.0	12.7	20	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 10.0	D	µg/l	10.0	7.28	20	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 10.0	D	µg/l	10.0	9.98	20	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 20.0	D	µg/l	20.0	19.0	20	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 10.0	D	µg/l	10.0	9.78	20	"	"	"	"	"	X

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Sample Identification

MW-53D/20131218

SB82197-03

Client Project #

08-14218G2

Matrix

Ground Water

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18-Dec-13 08:50

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 200	D	µg/l	200	13.2	20	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
98-82-8	Isopropylbenzene	< 20.0	D	µg/l	20.0	12.4	20	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 20.0	D	µg/l	20.0	12.2	20	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 20.0	D	µg/l	20.0	13.0	20	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 200	D	µg/l	200	55.2	20	"	"	"	"	"	X
75-09-2	Methylene chloride	< 40.0	D	µg/l	40.0	18.9	20	"	"	"	"	"	X
91-20-3	Naphthalene	< 20.0	D	µg/l	20.0	11.6	20	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 20.0	D	µg/l	20.0	15.2	20	"	"	"	"	"	X
100-42-5	Styrene	< 20.0	D	µg/l	20.0	12.3	20	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 20.0	D	µg/l	20.0	13.4	20	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 10.0	D	µg/l	10.0	6.34	20	"	"	"	"	"	X
127-18-4	Tetrachloroethene	112	D	µg/l	20.0	14.9	20	"	"	"	"	"	X
108-88-3	Toluene	< 20.0	D	µg/l	20.0	16.2	20	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 20.0	D	µg/l	20.0	7.52	20	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 20.0	D	µg/l	20.0	7.20	20	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 20.0	D	µg/l	20.0	15.7	20	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 20.0	D	µg/l	20.0	11.6	20	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 20.0	D	µg/l	20.0	12.8	20	"	"	"	"	"	X
79-01-6	Trichloroethene	203	D	µg/l	20.0	15.1	20	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 20.0	D	µg/l	20.0	12.6	20	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 20.0	D	µg/l	20.0	14.7	20	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 20.0	D	µg/l	20.0	15.1	20	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 20.0	D	µg/l	20.0	14.9	20	"	"	"	"	"	X
75-01-4	Vinyl chloride	31.2	D	µg/l	20.0	16.1	20	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 40.0	D	µg/l	40.0	32.8	20	"	"	"	"	"	X
95-47-6	o-Xylene	< 20.0	D	µg/l	20.0	17.6	20	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 40.0	D	µg/l	40.0	28.8	20	"	"	"	"	"	
60-29-7	Ethyl ether	< 20.0	D	µg/l	20.0	13.9	20	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 20.0	D	µg/l	20.0	14.4	20	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 20.0	D	µg/l	20.0	15.6	20	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 20.0	D	µg/l	20.0	14.5	20	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 200	D	µg/l	200	173	20	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 400	D	µg/l	400	240	20	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 100	D	µg/l	100	14.7	20	"	"	"	"	"	X
64-17-5	Ethanol	< 8000	D	µg/l	8000	700	20	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromoanisole	95	70-130 %	"	"	"	"
2037-26-5	Toluene-d8	99	70-130 %	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	102	70-130 %	"	"	"	"
1868-53-7	Dibromofluoromethane	103	70-130 %	"	"	"	"

Total Metals by EPA 200/6000 Series Methods

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Sample Identification

MW-53D/20131218

SB82197-03

Client Project #

08-14218G2

Matrix

Ground Water

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			BJW	1330591	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	30-Dec-13	TBC	1330961	X
7440-39-3	Barium	0.0308		mg/l	0.0050	0.0007	1	"	"	27-Dec-13	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.374		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	6.21	GS1, D	mg/l	0.0100	0.0058	5	"	"	31-Dec-13	"	"	X
7440-23-5	Sodium	227	R06	mg/l	5.00	0.0325	1	"	"	27-Dec-13	"	"	X
7440-02-0	Nickel	0.0296		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0485	R06	mg/l	0.0485	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	2.17		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330534	X
16887-00-6	Chloride	375	GS1, D	mg/l	26.0	3.22	26	EPA 300.0	18-Dec-13	18-Dec-13	ELE	1330469	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	27-Dec-13	RLT	1331013	X
14797-55-8	Nitrate as N	63.2	GS1, D	mg/l	2.60	0.546	26	EPA 300.0	18-Dec-13 16:14	18-Dec-13 23:02	ELE	1330469	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	18-Dec-13 16:14	18-Dec-13 22:42	"	"	X
	Total Dissolved Solids	2,040	LIV	mg/l	10	5	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	19-Dec-13	20-Dec-13	CMB	1330547	X
14808-79-8	Sulfate as SO4	698	GS1, D	mg/l	26.0	9.18	26	EPA 300.0	18-Dec-13	18-Dec-13	ELE	1330469	X
	Total Organic Carbon	4.69		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	23-Dec-13	23-Dec-13	PH-06	262947A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	394		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	['none']

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Sample Identification

MW-51B/20131218

SB82197-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	88.7	E	µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-51B/20131218

SB82197-04

Client Project #

08-14218G2

Matrix

Ground Water

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18-Dec-13 11:30

Received

18-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	2.69		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	22.6		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	93	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	98	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	108	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	112	70-130 %	"	"	"	"	"	"	"	"	"	"

Re-analysis of Volatile Organic Compounds by SW846

GS1

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-51B/20131218

SB82197-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

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CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
67-64-1	Acetone	< 265	D	µg/l	265	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	81.0	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X

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Sample Identification

MW-51B/20131218

SB82197-04

Client Project #

08-14218G2

Matrix

Ground Water

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18-Dec-13 11:30

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18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	19.2	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	4-Bromo fluorobenzene	93			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	95			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	99			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	100			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													

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Sample Identification

MW-51B/20131218

SB82197-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			BJW	1330591	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	27-Dec-13	ARF	1330961	X
7440-39-3	Barium	0.0498		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0572		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0372		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	19.5	R06	mg/l	5.00	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0314		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0552	R06	mg/l	0.0485	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330534	X
16887-00-6	Chloride	236	GS1, D	mg/l	13.0	1.61	13	EPA 300.0	18-Dec-13	18-Dec-13	ELE	1330469	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	27-Dec-13	RLT	1331013	X
14797-55-8	Nitrate as N	10.8	GS1, D	mg/l	1.30	0.273	13	EPA 300.0	18-Dec-13 16:14	18-Dec-13 23:48	ELE	1330469	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	18-Dec-13 16:14	18-Dec-13 23:27	"	"	X
	Total Dissolved Solids	1,370		mg/l	5	3	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	19-Dec-13	20-Dec-13	CMB	1330547	X
14808-79-8	Sulfate as SO4	326	GS1, D	mg/l	13.0	4.59	13	EPA 300.0	18-Dec-13	18-Dec-13	ELE	1330469	X
	Total Organic Carbon	2.48		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	23-Dec-13	23-Dec-13	PH-06	262947A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	61.9		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	['none']

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Sample Identification

MW-51D/20131218

SB82197-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	95.2	E	µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-51D/20131218

SB82197-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	41.1		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	66.4	E	µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	4.41		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92		70-130 %									
2037-26-5	Toluene-d8	97		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	108		70-130 %									
1868-53-7	Dibromofluoromethane	113		70-130 %									

Re-analysis of Volatile Organic Compounds by SW846

GS1

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-51D/20131218

SB82197-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
67-64-1	Acetone	< 205	D	µg/l	205	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	84.7	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X

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Sample Identification

MW-51D/20131218

SB82197-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	SW846 8260C	24-Dec-13	25-Dec-13	NAA	1330918	X
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	31.6	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	55.5	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	4-Bromo- <i>fluorobenzene</i>	93			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	91			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	96			70-130 %			"	"	"	"	"	
1868-53-7	Dibromo- <i>fluoromethane</i>	96			70-130 %			"	"	"	"	"	

Total Metals by EPA 200/6000 Series Methods*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-51D/20131218

SB82197-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 11:30

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			BJW	1330591	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	27-Dec-13	ARF	1330961	X
7440-39-3	Barium	0.0298		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0626		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0161		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	1.11		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	95.1	R06	mg/l	5.00	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0306		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0485	R06	mg/l	0.0485	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	0.959		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330534	X
16887-00-6	Chloride	185	GS1, D	mg/l	11.0	1.36	11	EPA 300.0	18-Dec-13	19-Dec-13	ELE	1330469	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	27-Dec-13	RLT	1331013	X
14797-55-8	Nitrate as N	19.5	GS1, D	mg/l	1.10	0.231	11	EPA 300.0	18-Dec-13 16:14	19-Dec-13 00:34	ELE	1330469	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	18-Dec-13 16:14	19-Dec-13 00:13	"	"	X
	Total Dissolved Solids	886		mg/l	5	3	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	19-Dec-13	20-Dec-13	CMB	1330547	X
14808-79-8	Sulfate as SO4	279	GS1, D	mg/l	11.0	3.88	11	EPA 300.0	18-Dec-13	19-Dec-13	ELE	1330469	X
	Total Organic Carbon	3.05		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	23-Dec-13	23-Dec-13	PH-06	262947A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	89.9		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	['none']

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Sample Identification

MW-42B/20131218

SB82197-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 14:20

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-42B/20131218

SB82197-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 14:20

Received

18-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	20-Dec-13	20-Dec-13	SJB	1330666	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	21.7		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92		70-130 %									
2037-26-5	Toluene-d8	99		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	113		70-130 %									
1868-53-7	Dibromofluoromethane	116		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330591
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Sample Identification

MW-42B/20131218

SB82197-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 14:20

Received

18-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	26-Dec-13	27-Dec-13	ARF	1330961	X
7440-39-3	Barium	0.0130		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0666		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.175		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	40.8	R06	mg/l	5.00	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0485	R06	mg/l	0.0485	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	0.177		mg/l	0.100	0.070	1	EPA 350.1	19-Dec-13	21-Dec-13	RLT	1330534	X
16887-00-6	Chloride	31.8		mg/l	1.00	0.124	1	EPA 300.0	18-Dec-13	19-Dec-13	ELE	1330469	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	26-Dec-13	27-Dec-13	RLT	1331013	X
14797-55-8	Nitrate as N	< 0.100		mg/l	0.100	0.0210	1	EPA 300.0	18-Dec-13 16:14	19-Dec-13 00:59	ELE	1330469	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	18-Dec-13 16:14	19-Dec-13 00:59	"	"	X
	Total Dissolved Solids	369		mg/l	5	3	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	19-Dec-13	20-Dec-13	CMB	1330547	X
14808-79-8	Sulfate as SO4	186	GS1, D	mg/l	5.00	1.76	5	EPA 300.0	19-Dec-13	20-Dec-13	EE	1330570	X
	Total Organic Carbon	1.95		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	40.9		µg/l	10		1	SW846 9020B			20-Dec-13	PH-05	["none"]

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330666 - SW846 5030 Water MS										
<u>Blank (1330666-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330666 - SW846 5030 Water MS										
<u>Blank (1330666-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	45.8		µg/l	50.0		92		70-130		
Surrogate: Toluene-d8	48.3		µg/l	50.0		97		70-130		
Surrogate: 1,2-Dichloroethane-d4	54.5		µg/l	50.0		109		70-130		
Surrogate: Dibromofluoromethane	54.7		µg/l	50.0		109		70-130		
<u>LCS (1330666-BS1)</u>										
Prepared & Analyzed: 20-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.3		µg/l	20.0		102		70-130		
Acetone	17.8		µg/l	20.0		89		70-130		
Acrylonitrile	18.6		µg/l	20.0		93		70-130		
Benzene	19.9		µg/l	20.0		99		70-130		
Bromobenzene	21.8		µg/l	20.0		109		70-130		
Bromoform	31.3	QC2	µg/l	20.0		120		70-130		
Bromochloromethane	21.6		µg/l	20.0		108		70-130		
Bromodichloromethane	24.0		µg/l	20.0		157		70-130		
Bromoform	16.1		µg/l	20.0		81		70-130		
2-Butanone (MEK)	18.0		µg/l	20.0		90		70-130		
n-Butylbenzene	21.9		µg/l	20.0		109		70-130		
sec-Butylbenzene	20.7		µg/l	20.0		104		70-130		
tert-Butylbenzene	24.0		µg/l	20.0		120		70-130		
Carbon disulfide	25.5		µg/l	20.0		128		70-130		
Carbon tetrachloride	25.4		µg/l	20.0		127		70-130		
Chlorobenzene	20.7		µg/l	20.0		104		70-130		
Chloroethane	19.2		µg/l	20.0		96		70-130		
Chloroform	21.4		µg/l	20.0		107		70-130		
Chloromethane	21.0		µg/l	20.0		105		70-130		
2-Chlorotoluene	21.6		µg/l	20.0		108		70-130		
4-Chlorotoluene	23.1		µg/l	20.0		115		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330666 - SW846 5030 Water MS										
<u>LCS (1330666-BS1)</u>										
<u>Prepared & Analyzed: 20-Dec-13</u>										
1,2-Dibromo-3-chloropropane	23.9		µg/l		20.0	119	70-130			
Dibromochloromethane	27.2	QC2	µg/l		20.0	136	70-130			
1,2-Dibromoethane (EDB)	19.9		µg/l		20.0	100	70-130			
Dibromomethane	18.8		µg/l		20.0	94	70-130			
1,2-Dichlorobenzene	21.6		µg/l		20.0	108	70-130			
1,3-Dichlorobenzene	22.5		µg/l		20.0	113	70-130			
1,4-Dichlorobenzene	19.8		µg/l		20.0	99	70-130			
Dichlorodifluoromethane (Freon12)	18.8		µg/l		20.0	94	70-130			
1,1-Dichloroethane	18.4		µg/l		20.0	92	70-130			
1,2-Dichloroethane	19.4		µg/l		20.0	97	70-130			
1,1-Dichloroethene	20.9		µg/l		20.0	104	70-130			
cis-1,2-Dichloroethene	20.1		µg/l		20.0	100	70-130			
trans-1,2-Dichloroethene	20.0		µg/l		20.0	100	70-130			
1,2-Dichloropropane	19.0		µg/l		20.0	95	70-130			
1,3-Dichloropropane	18.6		µg/l		20.0	93	70-130			
2,2-Dichloropropane	23.6		µg/l		20.0	118	70-130			
1,1-Dichloropropene	20.1		µg/l		20.0	100	70-130			
cis-1,3-Dichloropropene	23.4		µg/l		20.0	117	70-130			
trans-1,3-Dichloropropene	21.6		µg/l		20.0	108	70-130			
Ethylbenzene	21.6		µg/l		20.0	108	70-130			
Hexachlorobutadiene	22.2		µg/l		20.0	111	70-130			
2-Hexanone (MBK)	16.5		µg/l		20.0	82	70-130			
Isopropylbenzene	22.0		µg/l		20.0	110	70-130			
4-Isopropyltoluene	21.4		µg/l		20.0	107	70-130			
Methyl tert-butyl ether	16.5		µg/l		20.0	83	70-130			
4-Methyl-2-pentanone (MIBK)	17.4		µg/l		20.0	87	70-130			
Methylene chloride	20.8		µg/l		20.0	104	70-130			
Naphthalene	18.2		µg/l		20.0	91	70-130			
n-Propylbenzene	23.3		µg/l		20.0	116	70-130			
Styrene	21.9		µg/l		20.0	110	70-130			
1,1,1,2-Tetrachloroethane	26.1		µg/l		20.0	130	70-130			
1,1,2,2-Tetrachloroethane	19.5		µg/l		20.0	98	70-130			
Tetrachloroethene	20.1		µg/l		20.0	101	70-130			
Toluene	19.3		µg/l		20.0	97	70-130			
1,2,3-Trichlorobenzene	19.6		µg/l		20.0	98	70-130			
1,2,4-Trichlorobenzene	18.8		µg/l		20.0	94	70-130			
1,3,5-Trichlorobenzene	20.6		µg/l		20.0	103	70-130			
1,1,1-Trichloroethane	22.6		µg/l		20.0	113	70-130			
1,1,2-Trichloroethane	19.9		µg/l		20.0	99	70-130			
Trichloroethene	20.6		µg/l		20.0	103	70-130			
Trichlorofluoromethane (Freon 11)	22.3		µg/l		20.0	112	70-130			
1,2,3-Trichloropropane	20.8		µg/l		20.0	104	70-130			
1,2,4-Trimethylbenzene	23.0		µg/l		20.0	115	70-130			
1,3,5-Trimethylbenzene	23.0		µg/l		20.0	115	70-130			
Vinyl chloride	17.4		µg/l		20.0	87	70-130			
m,p-Xylene	45.0		µg/l		40.0	112	70-130			
o-Xylene	22.9		µg/l		20.0	114	70-130			
Tetrahydrofuran	18.6		µg/l		20.0	93	70-130			
Ethyl ether	18.6		µg/l		20.0	93	70-130			
Tert-amyl methyl ether	20.4		µg/l		20.0	102	70-130			
Ethyl tert-butyl ether	16.4		µg/l		20.0	82	70-130			
Di-isopropyl ether	19.8		µg/l		20.0	99	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330666 - SW846 5030 Water MS										
<u>LCS (1330666-BS1)</u>										
Tert-Butanol / butyl alcohol	163		µg/l		200	82	70-130			
1,4-Dioxane	184		µg/l		200	92	70-130			
trans-1,4-Dichloro-2-butene	21.5		µg/l		20.0	108	70-130			
Ethanol	426		µg/l		400	106	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	53.1		µg/l		50.0	106	70-130			
<u>Surrogate: Toluene-d8</u>										
	48.8		µg/l		50.0	98	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	50.9		µg/l		50.0	102	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	53.1		µg/l		50.0	106	70-130			
<u>LCS Dup (1330666-BSD1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.1		µg/l		20.0	96	70-130	6	20	
Acetone	17.5		µg/l		20.0	88	70-130	1	20	
Acrylonitrile	18.5		µg/l		20.0	93	70-130	0.5	20	
Benzene	18.4		µg/l		20.0	92	70-130	8	20	
Bromobenzene	21.6		µg/l		20.0	108	70-130	1	20	
Bromochloromethane	20.8		µg/l		20.0	104	70-130	4	20	
Bromodichloromethane	24.2		µg/l		20.0	121	70-130	1	20	
Bromoform	31.7	QC2	µg/l		20.0	158	70-130	1	20	
Bromomethane	14.8		µg/l		20.0	74	70-130	8	20	
2-Butanone (MEK)	18.8		µg/l		20.0	94	70-130	4	20	
n-Butylbenzene	20.4		µg/l		20.0	102	70-130	7	20	
sec-Butylbenzene	19.9		µg/l		20.0	100	70-130	4	20	
tert-Butylbenzene	22.7		µg/l		20.0	113	70-130	6	20	
Carbon disulfide	23.5		µg/l		20.0	117	70-130	8	20	
Carbon tetrachloride	23.8		µg/l		20.0	119	70-130	7	20	
Chlorobenzene	20.5		µg/l		20.0	102	70-130	1	20	
Chloroethane	17.8		µg/l		20.0	89	70-130	7	20	
Chloroform	20.5		µg/l		20.0	102	70-130	4	20	
Chloromethane	20.0		µg/l		20.0	100	70-130	5	20	
2-Chlorotoluene	21.4		µg/l		20.0	107	70-130	1	20	
4-Chlorotoluene	22.5		µg/l		20.0	113	70-130	2	20	
1,2-Dibromo-3-chloropropane	24.8		µg/l		20.0	124	70-130	4	20	
Dibromochloromethane	26.2	QC2	µg/l		20.0	131	70-130	4	20	
1,2-Dibromoethane (EDB)	19.6		µg/l		20.0	98	70-130	2	20	
Dibromomethane	17.8		µg/l		20.0	89	70-130	6	20	
1,2-Dichlorobenzene	21.3		µg/l		20.0	107	70-130	1	20	
1,3-Dichlorobenzene	22.4		µg/l		20.0	112	70-130	0.6	20	
1,4-Dichlorobenzene	19.2		µg/l		20.0	96	70-130	3	20	
Dichlorodifluoromethane (Freon12)	17.1		µg/l		20.0	85	70-130	9	20	
1,1-Dichloroethane	17.5		µg/l		20.0	88	70-130	5	20	
1,2-Dichloroethane	19.1		µg/l		20.0	95	70-130	2	20	
1,1-Dichloroethene	19.2		µg/l		20.0	96	70-130	8	20	
cis-1,2-Dichloroethene	19.0		µg/l		20.0	95	70-130	6	20	
trans-1,2-Dichloroethene	19.4		µg/l		20.0	97	70-130	3	20	
1,2-Dichloropropane	18.0		µg/l		20.0	90	70-130	5	20	
1,3-Dichloropropane	18.4		µg/l		20.0	92	70-130	1	20	
2,2-Dichloropropane	22.4		µg/l		20.0	112	70-130	6	20	
1,1-Dichloropropene	18.6		µg/l		20.0	93	70-130	8	20	
cis-1,3-Dichloropropene	23.0		µg/l		20.0	115	70-130	2	20	
trans-1,3-Dichloropropene	21.2		µg/l		20.0	106	70-130	2	20	
Ethylbenzene	21.0		µg/l		20.0	105	70-130	3	20	
Hexachlorobutadiene	20.7		µg/l		20.0	104	70-130	7	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330666 - SW846 5030 Water MS										
<u>LCS Dup (1330666-BSD1)</u>										
<u>Prepared & Analyzed: 20-Dec-13</u>										
2-Hexanone (MBK)	17.5		µg/l		20.0	87	70-130	6	20	
Isopropylbenzene	21.0		µg/l		20.0	105	70-130	4	20	
4-Isopropyltoluene	20.1		µg/l		20.0	100	70-130	6	20	
Methyl tert-butyl ether	16.6		µg/l		20.0	83	70-130	0.06	20	
4-Methyl-2-pentanone (MIBK)	17.0		µg/l		20.0	85	70-130	2	20	
Methylene chloride	19.8		µg/l		20.0	99	70-130	5	20	
Naphthalene	17.8		µg/l		20.0	89	70-130	2	20	
n-Propylbenzene	22.1		µg/l		20.0	110	70-130	5	20	
Styrene	21.7		µg/l		20.0	108	70-130	1	20	
1,1,1,2-Tetrachloroethane	25.0		µg/l		20.0	125	70-130	4	20	
1,1,2,2-Tetrachloroethane	20.5		µg/l		20.0	102	70-130	5	20	
Tetrachloroethene	18.7		µg/l		20.0	93	70-130	8	20	
Toluene	18.7		µg/l		20.0	93	70-130	4	20	
1,2,3-Trichlorobenzene	20.8		µg/l		20.0	104	70-130	6	20	
1,2,4-Trichlorobenzene	18.5		µg/l		20.0	93	70-130	2	20	
1,3,5-Trichlorobenzene	20.1		µg/l		20.0	100	70-130	3	20	
1,1,1-Trichloroethane	20.6		µg/l		20.0	103	70-130	10	20	
1,1,2-Trichloroethane	19.4		µg/l		20.0	97	70-130	3	20	
Trichloroethene	18.7		µg/l		20.0	94	70-130	9	20	
Trichlorofluoromethane (Freon 11)	20.7		µg/l		20.0	104	70-130	7	20	
1,2,3-Trichloropropane	21.5		µg/l		20.0	107	70-130	3	20	
1,2,4-Trimethylbenzene	22.1		µg/l		20.0	110	70-130	4	20	
1,3,5-Trimethylbenzene	21.9		µg/l		20.0	110	70-130	5	20	
Vinyl chloride	15.2		µg/l		20.0	76	70-130	14	20	
m,p-Xylene	44.1		µg/l		40.0	110	70-130	2	20	
o-Xylene	22.1		µg/l		20.0	110	70-130	4	20	
Tetrahydrofuran	17.9		µg/l		20.0	90	70-130	4	20	
Ethyl ether	18.5		µg/l		20.0	92	70-130	1	20	
Tert-amyl methyl ether	20.0		µg/l		20.0	100	70-130	2	20	
Ethyl tert-butyl ether	16.1		µg/l		20.0	80	70-130	2	20	
Di-isopropyl ether	18.8		µg/l		20.0	94	70-130	5	20	
Tert-Butanol / butyl alcohol	164		µg/l		200	82	70-130	0.4	20	
1,4-Dioxane	183		µg/l		200	91	70-130	0.5	20	
trans-1,4-Dichloro-2-butene	20.8		µg/l		20.0	104	70-130	4	20	
Ethanol	406		µg/l		400	102	70-130	5	20	
Surrogate: 4-Bromofluorobenzene	53.7		µg/l		50.0	107	70-130			
Surrogate: Toluene-d8	49.1		µg/l		50.0	98	70-130			
Surrogate: 1,2-Dichloroethane-d4	50.0		µg/l		50.0	100	70-130			
Surrogate: Dibromofluoromethane	52.8		µg/l		50.0	106	70-130			
<u>Matrix Spike (1330666-MS1)</u>										
<u>Source: SB82197-02</u>										
<u>Prepared & Analyzed: 20-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2	D	µg/l		20.0	BRL	106	70-130		
Acetone	17.6	D	µg/l		20.0	BRL	88	70-130		
Acrylonitrile	18.8	D	µg/l		20.0	BRL	94	70-130		
Benzene	18.7	D	µg/l		20.0	BRL	94	70-130		
Bromobenzene	20.6	D	µg/l		20.0	BRL	103	70-130		
Bromochloromethane	20.8	D	µg/l		20.0	BRL	104	70-130		
Bromodichloromethane	23.7	D	µg/l		20.0	BRL	118	70-130		
Bromoform	33.7	QC2, D	µg/l		20.0	BRL	169	70-130		
Bromomethane	15.3	D	µg/l		20.0	BRL	76	70-130		
2-Butanone (MEK)	17.3	D	µg/l		20.0	BRL	87	70-130		
n-Butylbenzene	20.7	D	µg/l		20.0	BRL	103	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330666 - SW846 5030 Water MS													
<u>Matrix Spike (1330666-MS1)</u>													
					<u>Source: SB82197-02</u>	Prepared & Analyzed: 20-Dec-13							
sec-Butylbenzene	21.0	D	µg/l		20.0	BRL	105	70-130					
tert-Butylbenzene	23.0	D	µg/l		20.0	BRL	115	70-130					
Carbon disulfide	24.9	D	µg/l		20.0	BRL	124	70-130					
Carbon tetrachloride	24.8	D	µg/l		20.0	BRL	124	70-130					
Chlorobenzene	20.2	D	µg/l		20.0	BRL	101	70-130					
Chloroethane	18.4	D	µg/l		20.0	BRL	92	70-130					
Chloroform	20.3	D	µg/l		20.0	BRL	102	70-130					
Chloromethane	21.4	D	µg/l		20.0	BRL	107	70-130					
2-Chlorotoluene	21.6	D	µg/l		20.0	BRL	108	70-130					
4-Chlorotoluene	22.8	D	µg/l		20.0	BRL	114	70-130					
1,2-Dibromo-3-chloropropane	26.7	QM7, D	µg/l		20.0	BRL	134	70-130					
Dibromochloromethane	27.6	QC2, D	µg/l		20.0	BRL	138	70-130					
1,2-Dibromoethane (EDB)	19.7	D	µg/l		20.0	BRL	99	70-130					
Dibromomethane	17.8	D	µg/l		20.0	BRL	89	70-130					
1,2-Dichlorobenzene	20.6	D	µg/l		20.0	BRL	103	70-130					
1,3-Dichlorobenzene	21.9	D	µg/l		20.0	BRL	109	70-130					
1,4-Dichlorobenzene	20.0	D	µg/l		20.0	BRL	100	70-130					
Dichlorodifluoromethane (Freon12)	20.0	D	µg/l		20.0	BRL	100	70-130					
1,1-Dichloroethane	19.2	D	µg/l		20.0	BRL	96	70-130					
1,2-Dichloroethane	19.2	D	µg/l		20.0	BRL	96	70-130					
1,1-Dichloroethene	20.1	D	µg/l		20.0	0.24	99	70-130					
cis-1,2-Dichloroethene	51.6	D, E	µg/l		20.0	35.2	82	70-130					
trans-1,2-Dichloroethene	19.9	D	µg/l		20.0	0.13	99	70-130					
1,2-Dichloropropane	18.4	D	µg/l		20.0	BRL	92	70-130					
1,3-Dichloropropane	18.3	D	µg/l		20.0	BRL	92	70-130					
2,2-Dichloropropane	22.7	D	µg/l		20.0	BRL	114	70-130					
1,1-Dichloropropene	19.2	D	µg/l		20.0	BRL	96	70-130					
cis-1,3-Dichloropropene	21.6	D	µg/l		20.0	BRL	108	70-130					
trans-1,3-Dichloropropene	21.4	D	µg/l		20.0	BRL	107	70-130					
Ethylbenzene	21.1	D	µg/l		20.0	BRL	106	70-130					
Hexachlorobutadiene	20.7	D	µg/l		20.0	BRL	104	70-130					
2-Hexanone (MBK)	17.3	D	µg/l		20.0	BRL	86	70-130					
Isopropylbenzene	21.6	D	µg/l		20.0	BRL	108	70-130					
4-Isopropyltoluene	20.1	D	µg/l		20.0	BRL	101	70-130					
Methyl tert-butyl ether	16.0	D	µg/l		20.0	BRL	80	70-130					
4-Methyl-2-pentanone (MIBK)	16.2	D	µg/l		20.0	BRL	81	70-130					
Methylene chloride	20.2	D	µg/l		20.0	BRL	101	70-130					
Naphthalene	15.8	D	µg/l		20.0	BRL	79	70-130					
n-Propylbenzene	22.9	D	µg/l		20.0	BRL	114	70-130					
Styrene	21.1	D	µg/l		20.0	BRL	106	70-130					
1,1,1,2-Tetrachloroethane	25.4	D	µg/l		20.0	BRL	127	70-130					
1,1,2,2-Tetrachloroethane	20.7	D	µg/l		20.0	BRL	104	70-130					
Tetrachloroethene	28.7	D	µg/l		20.0	10.5	91	70-130					
Toluene	18.9	D	µg/l		20.0	BRL	94	70-130					
1,2,3-Trichlorobenzene	18.0	D	µg/l		20.0	BRL	90	70-130					
1,2,4-Trichlorobenzene	18.1	D	µg/l		20.0	BRL	91	70-130					
1,3,5-Trichlorobenzene	18.7	D	µg/l		20.0	BRL	94	70-130					
1,1,1-Trichloroethane	21.9	D	µg/l		20.0	BRL	110	70-130					
1,1,2-Trichloroethane	19.0	D	µg/l		20.0	BRL	95	70-130					
Trichloroethene	35.1	D	µg/l		20.0	17.1	90	70-130					
Trichlorofluoromethane (Freon 11)	22.2	D	µg/l		20.0	BRL	111	70-130					
1,2,3-Trichloropropane	21.3	D	µg/l		20.0	BRL	106	70-130					

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
Batch 1330666 - SW846 5030 Water MS											
<u>Matrix Spike (1330666-MS1)</u>											
					Source: SB82197-02	Prepared & Analyzed: 20-Dec-13					
1,2,4-Trimethylbenzene	21.8	D	µg/l		20.0	BRL	109	70-130			
1,3,5-Trimethylbenzene	21.9	D	µg/l		20.0	BRL	110	70-130			
Vinyl chloride	18.5	D	µg/l		20.0	0.98	88	70-130			
m,p-Xylene	45.3	D	µg/l		40.0	BRL	113	70-130			
o-Xylene	22.6	D	µg/l		20.0	BRL	113	70-130			
Tetrahydrofuran	18.1	D	µg/l		20.0	BRL	90	70-130			
Ethyl ether	18.1	D	µg/l		20.0	BRL	90	70-130			
Tert-amyl methyl ether	20.1	D	µg/l		20.0	BRL	100	70-130			
Ethyl tert-butyl ether	15.7	D	µg/l		20.0	BRL	78	70-130			
Di-isopropyl ether	18.7	D	µg/l		20.0	BRL	93	70-130			
Tert-Butanol / butyl alcohol	170	D	µg/l		200	BRL	85	70-130			
1,4-Dioxane	184	D	µg/l		200	BRL	92	70-130			
trans-1,4-Dichloro-2-butene	19.8	D	µg/l		20.0	BRL	99	70-130			
Ethanol	397	D	µg/l		400	BRL	99	70-130			
Surrogate: 4-Bromofluorobenzene	53.2		µg/l		50.0		106	70-130			
Surrogate: Toluene-d8	48.1		µg/l		50.0		96	70-130			
Surrogate: 1,2-Dichloroethane-d4	51.0		µg/l		50.0		102	70-130			
Surrogate: Dibromofluoromethane	53.0		µg/l		50.0		106	70-130			
<u>Matrix Spike Dup (1330666-MSD1)</u>											
					Source: SB82197-02	Prepared & Analyzed: 20-Dec-13					
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.0	D	µg/l		20.0	BRL	100	70-130	6	20	
Acetone	18.4	D	µg/l		20.0	BRL	92	70-130	4	20	
Acrylonitrile	18.8	D	µg/l		20.0	BRL	94	70-130	0.2	20	
Benzene	19.0	D	µg/l		20.0	BRL	95	70-130	1	20	
Bromobenzene	20.8	D	µg/l		20.0	BRL	104	70-130	0.8	20	
Bromoform	20.4	D	µg/l		20.0	BRL	102	70-130	2	20	
Bromochloromethane	24.1	D	µg/l		20.0	BRL	120	70-130	2	20	
Bromodichloromethane	32.3	QC2, D	µg/l		20.0	BRL	162	70-130	4	20	
Bromoform	14.5	D	µg/l		20.0	BRL	72	70-130	5	20	
2-Butanone (MEK)	18.9	D	µg/l		20.0	BRL	94	70-130	9	20	
n-Butylbenzene	21.4	D	µg/l		20.0	BRL	107	70-130	4	20	
sec-Butylbenzene	20.4	D	µg/l		20.0	BRL	102	70-130	3	20	
tert-Butylbenzene	23.2	D	µg/l		20.0	BRL	116	70-130	0.9	20	
Carbon disulfide	24.8	D	µg/l		20.0	BRL	124	70-130	0.6	20	
Carbon tetrachloride	24.4	D	µg/l		20.0	BRL	122	70-130	2	20	
Chlorobenzene	20.5	D	µg/l		20.0	BRL	102	70-130	1	20	
Chloroethane	18.6	D	µg/l		20.0	BRL	93	70-130	1	20	
Chloroform	20.7	D	µg/l		20.0	BRL	103	70-130	2	20	
Chloromethane	21.7	D	µg/l		20.0	BRL	109	70-130	1	20	
2-Chlorotoluene	21.5	D	µg/l		20.0	BRL	108	70-130	0.09	20	
4-Chlorotoluene	23.0	D	µg/l		20.0	BRL	115	70-130	1	20	
1,2-Dibromo-3-chloropropane	28.0	QM7, D	µg/l		20.0	BRL	140	70-130	5	20	
Dibromochloromethane	26.8	QC2, D	µg/l		20.0	BRL	134	70-130	3	20	
1,2-Dibromoethane (EDB)	19.6	D	µg/l		20.0	BRL	98	70-130	0.5	20	
Dibromomethane	18.4	D	µg/l		20.0	BRL	92	70-130	3	20	
1,2-Dichlorobenzene	21.2	D	µg/l		20.0	BRL	106	70-130	3	20	
1,3-Dichlorobenzene	22.0	D	µg/l		20.0	BRL	110	70-130	0.8	20	
1,4-Dichlorobenzene	20.5	D	µg/l		20.0	BRL	102	70-130	2	20	
Dichlorodifluoromethane (Freon12)	19.3	D	µg/l		20.0	BRL	96	70-130	4	20	
1,1-Dichloroethane	20.6	D	µg/l		20.0	BRL	103	70-130	7	20	
1,2-Dichloroethane	19.4	D	µg/l		20.0	BRL	97	70-130	1	20	
1,1-Dichloroethene	20.3	D	µg/l		20.0	0.24	100	70-130	1	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330666 - SW846 5030 Water MS													
<u>Matrix Spike Dup (1330666-MSD1)</u>													
					<u>Source: SB82197-02</u>	Prepared & Analyzed: 20-Dec-13							
cis-1,2-Dichloroethene	51.3	D, E	µg/l		20.0	35.2	81	70-130	2	20			
trans-1,2-Dichloroethene	19.6	D	µg/l		20.0	0.13	97	70-130	1	20			
1,2-Dichloropropane	18.7	D	µg/l		20.0	BRL	93	70-130	1	20			
1,3-Dichloropropane	18.5	D	µg/l		20.0	BRL	93	70-130	1	20			
2,2-Dichloropropane	23.0	D	µg/l		20.0	BRL	115	70-130	1	20			
1,1-Dichloropropene	18.9	D	µg/l		20.0	BRL	94	70-130	2	20			
cis-1,3-Dichloropropene	22.0	D	µg/l		20.0	BRL	110	70-130	2	20			
trans-1,3-Dichloropropene	21.1	D	µg/l		20.0	BRL	106	70-130	1	20			
Ethylbenzene	21.3	D	µg/l		20.0	BRL	107	70-130	0.9	20			
Hexachlorobutadiene	23.2	D	µg/l		20.0	BRL	116	70-130	11	20			
2-Hexanone (MBK)	17.8	D	µg/l		20.0	BRL	89	70-130	3	20			
Isopropylbenzene	21.5	D	µg/l		20.0	BRL	107	70-130	0.7	20			
4-Isopropyltoluene	21.2	D	µg/l		20.0	BRL	106	70-130	5	20			
Methyl tert-butyl ether	17.5	D	µg/l		20.0	BRL	88	70-130	9	20			
4-Methyl-2-pentanone (MIBK)	16.0	D	µg/l		20.0	BRL	80	70-130	1	20			
Methylene chloride	20.5	D	µg/l		20.0	BRL	102	70-130	1	20			
Naphthalene	17.8	D	µg/l		20.0	BRL	89	70-130	12	20			
n-Propylbenzene	22.5	D	µg/l		20.0	BRL	112	70-130	2	20			
Styrene	21.4	D	µg/l		20.0	BRL	107	70-130	2	20			
1,1,1,2-Tetrachloroethane	24.8	D	µg/l		20.0	BRL	124	70-130	2	20			
1,1,2,2-Tetrachloroethane	21.0	D	µg/l		20.0	BRL	105	70-130	1	20			
Tetrachloroethene	28.4	D	µg/l		20.0	10.5	89	70-130	2	20			
Toluene	19.0	D	µg/l		20.0	BRL	95	70-130	0.9	20			
1,2,3-Trichlorobenzene	21.2	D	µg/l		20.0	BRL	106	70-130	16	20			
1,2,4-Trichlorobenzene	19.5	D	µg/l		20.0	BRL	97	70-130	7	20			
1,3,5-Trichlorobenzene	20.5	D	µg/l		20.0	BRL	102	70-130	9	20			
1,1,1-Trichloroethane	20.8	D	µg/l		20.0	BRL	104	70-130	5	20			
1,1,2-Trichloroethane	19.4	D	µg/l		20.0	BRL	97	70-130	2	20			
Trichloroethene	34.4	D	µg/l		20.0	17.1	87	70-130	4	20			
Trichlorofluoromethane (Freon 11)	21.6	D	µg/l		20.0	BRL	108	70-130	3	20			
1,2,3-Trichloropropane	20.8	D	µg/l		20.0	BRL	104	70-130	2	20			
1,2,4-Trimethylbenzene	21.6	D	µg/l		20.0	BRL	108	70-130	0.9	20			
1,3,5-Trimethylbenzene	22.2	D	µg/l		20.0	BRL	111	70-130	1	20			
Vinyl chloride	18.2	D	µg/l		20.0	0.98	86	70-130	2	20			
m,p-Xylene	44.2	D	µg/l		40.0	BRL	111	70-130	3	20			
o-Xylene	22.0	D	µg/l		20.0	BRL	110	70-130	3	20			
Tetrahydrofuran	19.1	D	µg/l		20.0	BRL	96	70-130	6	20			
Ethyl ether	18.3	D	µg/l		20.0	BRL	92	70-130	1	20			
Tert-amyl methyl ether	20.0	D	µg/l		20.0	BRL	100	70-130	0.4	20			
Ethyl tert-butyl ether	15.7	D	µg/l		20.0	BRL	78	70-130	0.1	20			
Di-isopropyl ether	18.9	D	µg/l		20.0	BRL	95	70-130	1	20			
Tert-Butanol / butyl alcohol	159	D	µg/l		200	BRL	79	70-130	7	20			
1,4-Dioxane	181	D	µg/l		200	BRL	90	70-130	2	20			
trans-1,4-Dichloro-2-butene	20.0	D	µg/l		20.0	BRL	100	70-130	0.9	20			
Ethanol	415	D	µg/l		400	BRL	104	70-130	4	20			
Surrogate: 4-Bromofluorobenzene	51.7		µg/l		50.0		103	70-130					
Surrogate: Toluene-d8	48.3		µg/l		50.0		97	70-130					
Surrogate: 1,2-Dichloroethane-d4	51.8		µg/l		50.0		104	70-130					
Surrogate: Dibromofluoromethane	52.8		µg/l		50.0		106	70-130					
Batch 1330918 - SW846 5030 Water MS													
<u>Blank (1330918-BLK1)</u>						Prepared & Analyzed: 24-Dec-13							

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330918 - SW846 5030 Water MS										
<u>Blank (1330918-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330918 - SW846 5030 Water MS										
<u>Blank (1330918-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	48.4		µg/l	50.0		97		70-130		
Surrogate: Toluene-d8	50.7		µg/l	50.0		101		70-130		
Surrogate: 1,2-Dichloroethane-d4	52.4		µg/l	50.0		105		70-130		
Surrogate: Dibromofluoromethane	52.0		µg/l	50.0		104		70-130		
<u>LCS (1330918-BS1)</u>										
Prepared & Analyzed: 24-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.7		µg/l	20.0		103		70-130		
Acetone	24.1		µg/l	20.0		121		70-130		
Acrylonitrile	22.4		µg/l	20.0		112		70-130		
Benzene	20.1		µg/l	20.0		101		70-130		
Bromobenzene	20.8		µg/l	20.0		104		70-130		
Bromoform	22.4		µg/l	20.0		112		70-130		
Bromochloromethane	21.2		µg/l	20.0		106		70-130		
Bromodichloromethane	20.1		µg/l	20.0		100		70-130		
Bromoform	20.5		µg/l	20.0		103		70-130		
2-Butanone (MEK)	22.6		µg/l	20.0		113		70-130		
n-Butylbenzene	20.1		µg/l	20.0		100		70-130		
sec-Butylbenzene	18.8		µg/l	20.0		94		70-130		
tert-Butylbenzene	18.2		µg/l	20.0		91		70-130		
Carbon disulfide	20.2		µg/l	20.0		101		70-130		
Carbon tetrachloride	17.0		µg/l	20.0		85		70-130		
Chlorobenzene	20.2		µg/l	20.0		101		70-130		
Chloroethane	21.4		µg/l	20.0		107		70-130		
Chloroform	18.9		µg/l	20.0		94		70-130		
Chloromethane	20.9		µg/l	20.0		104		70-130		
2-Chlorotoluene	21.8		µg/l	20.0		109		70-130		
4-Chlorotoluene	22.4		µg/l	20.0		112		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330918 - SW846 5030 Water MS										
<u>LCS (1330918-BS1)</u>										
<u>Prepared & Analyzed: 24-Dec-13</u>										
1,2-Dibromo-3-chloropropane	18.2		µg/l		20.0	91	70-130			
Dibromochloromethane	21.6		µg/l		20.0	108	70-130			
1,2-Dibromoethane (EDB)	21.8		µg/l		20.0	109	70-130			
Dibromomethane	20.4		µg/l		20.0	102	70-130			
1,2-Dichlorobenzene	21.1		µg/l		20.0	105	70-130			
1,3-Dichlorobenzene	21.3		µg/l		20.0	107	70-130			
1,4-Dichlorobenzene	20.5		µg/l		20.0	102	70-130			
Dichlorodifluoromethane (Freon12)	21.9		µg/l		20.0	110	70-130			
1,1-Dichloroethane	21.1		µg/l		20.0	105	70-130			
1,2-Dichloroethane	21.2		µg/l		20.0	106	70-130			
1,1-Dichloroethene	21.8		µg/l		20.0	109	70-130			
cis-1,2-Dichloroethene	21.2		µg/l		20.0	106	70-130			
trans-1,2-Dichloroethene	21.5		µg/l		20.0	107	70-130			
1,2-Dichloropropane	22.3		µg/l		20.0	112	70-130			
1,3-Dichloropropane	22.2		µg/l		20.0	111	70-130			
2,2-Dichloropropane	18.2		µg/l		20.0	91	70-130			
1,1-Dichloropropene	21.3		µg/l		20.0	106	70-130			
cis-1,3-Dichloropropene	21.2		µg/l		20.0	106	70-130			
trans-1,3-Dichloropropene	21.2		µg/l		20.0	106	70-130			
Ethylbenzene	19.5		µg/l		20.0	97	70-130			
Hexachlorobutadiene	16.9		µg/l		20.0	85	70-130			
2-Hexanone (MBK)	19.0		µg/l		20.0	95	70-130			
Isopropylbenzene	21.5		µg/l		20.0	107	70-130			
4-Isopropyltoluene	18.8		µg/l		20.0	94	70-130			
Methyl tert-butyl ether	22.2		µg/l		20.0	111	70-130			
4-Methyl-2-pentanone (MIBK)	20.2		µg/l		20.0	101	70-130			
Methylene chloride	19.5		µg/l		20.0	98	70-130			
Naphthalene	19.3		µg/l		20.0	96	70-130			
n-Propylbenzene	18.9		µg/l		20.0	95	70-130			
Styrene	18.6		µg/l		20.0	93	70-130			
1,1,1,2-Tetrachloroethane	19.1		µg/l		20.0	95	70-130			
1,1,2,2-Tetrachloroethane	23.5		µg/l		20.0	117	70-130			
Tetrachloroethene	21.3		µg/l		20.0	106	70-130			
Toluene	21.5		µg/l		20.0	108	70-130			
1,2,3-Trichlorobenzene	18.5		µg/l		20.0	92	70-130			
1,2,4-Trichlorobenzene	18.3		µg/l		20.0	91	70-130			
1,3,5-Trichlorobenzene	18.2		µg/l		20.0	91	70-130			
1,1,1-Trichloroethane	19.6		µg/l		20.0	98	70-130			
1,1,2-Trichloroethane	21.8		µg/l		20.0	109	70-130			
Trichloroethene	21.3		µg/l		20.0	107	70-130			
Trichlorofluoromethane (Freon 11)	21.0		µg/l		20.0	105	70-130			
1,2,3-Trichloropropane	22.5		µg/l		20.0	113	70-130			
1,2,4-Trimethylbenzene	19.8		µg/l		20.0	99	70-130			
1,3,5-Trimethylbenzene	19.3		µg/l		20.0	96	70-130			
Vinyl chloride	20.4		µg/l		20.0	102	70-130			
m,p-Xylene	38.8		µg/l		40.0	97	70-130			
o-Xylene	19.3		µg/l		20.0	96	70-130			
Tetrahydrofuran	20.9		µg/l		20.0	104	70-130			
Ethyl ether	23.1		µg/l		20.0	116	70-130			
Tert-amyl methyl ether	19.9		µg/l		20.0	100	70-130			
Ethyl tert-butyl ether	21.6		µg/l		20.0	108	70-130			
Di-isopropyl ether	21.2		µg/l		20.0	106	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330918 - SW846 5030 Water MS										
<u>LCS (1330918-BS1)</u>										
Tert-Butanol / butyl alcohol	213		µg/l		200	107		70-130		
1,4-Dioxane	159		µg/l		200	80		70-130		
trans-1,4-Dichloro-2-butene	18.5		µg/l		20.0	93		70-130		
Ethanol	458		µg/l		400	115		70-130		
<u>Surrogate: 4-Bromofluorobenzene</u>										
	50.4		µg/l		50.0	101		70-130		
<u>Surrogate: Toluene-d8</u>										
	51.7		µg/l		50.0	103		70-130		
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	52.0		µg/l		50.0	104		70-130		
<u>Surrogate: Dibromofluoromethane</u>										
	53.2		µg/l		50.0	106		70-130		
<u>LCS Dup (1330918-BSD1)</u>										
<u>Prepared & Analyzed: 24-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.3		µg/l		20.0	102		70-130	2	20
Acetone	24.2		µg/l		20.0	121		70-130	0.2	20
Acrylonitrile	19.6		µg/l		20.0	98		70-130	13	20
Benzene	19.3		µg/l		20.0	97		70-130	4	20
Bromobenzene	20.6		µg/l		20.0	103		70-130	0.8	20
Bromochloromethane	21.4		µg/l		20.0	107		70-130	5	20
Bromodichloromethane	20.4		µg/l		20.0	102		70-130	4	20
Bromoform	19.2		µg/l		20.0	96		70-130	5	20
Bromomethane	19.8		µg/l		20.0	99		70-130	4	20
2-Butanone (MEK)	21.0		µg/l		20.0	105		70-130	8	20
n-Butylbenzene	19.7		µg/l		20.0	99		70-130	2	20
sec-Butylbenzene	18.9		µg/l		20.0	94		70-130	0.6	20
tert-Butylbenzene	18.3		µg/l		20.0	92		70-130	0.3	20
Carbon disulfide	19.6		µg/l		20.0	98		70-130	3	20
Carbon tetrachloride	17.1		µg/l		20.0	85		70-130	0.1	20
Chlorobenzene	19.8		µg/l		20.0	99		70-130	2	20
Chloroethane	20.8		µg/l		20.0	104		70-130	3	20
Chloroform	18.5		µg/l		20.0	92		70-130	2	20
Chloromethane	19.9		µg/l		20.0	100		70-130	5	20
2-Chlorotoluene	21.3		µg/l		20.0	106		70-130	3	20
4-Chlorotoluene	21.9		µg/l		20.0	109		70-130	2	20
1,2-Dibromo-3-chloropropane	18.0		µg/l		20.0	90		70-130	1	20
Dibromochloromethane	20.3		µg/l		20.0	102		70-130	6	20
1,2-Dibromoethane (EDB)	20.5		µg/l		20.0	102		70-130	7	20
Dibromomethane	20.2		µg/l		20.0	101		70-130	0.9	20
1,2-Dichlorobenzene	20.7		µg/l		20.0	103		70-130	2	20
1,3-Dichlorobenzene	21.0		µg/l		20.0	105		70-130	2	20
1,4-Dichlorobenzene	20.1		µg/l		20.0	100		70-130	2	20
Dichlorodifluoromethane (Freon12)	21.5		µg/l		20.0	107		70-130	2	20
1,1-Dichloroethane	20.4		µg/l		20.0	102		70-130	3	20
1,2-Dichloroethane	19.6		µg/l		20.0	98		70-130	8	20
1,1-Dichloroethene	20.7		µg/l		20.0	104		70-130	5	20
cis-1,2-Dichloroethene	20.2		µg/l		20.0	101		70-130	5	20
trans-1,2-Dichloroethene	20.5		µg/l		20.0	103		70-130	5	20
1,2-Dichloropropane	21.3		µg/l		20.0	107		70-130	4	20
1,3-Dichloropropane	20.8		µg/l		20.0	104		70-130	7	20
2,2-Dichloropropane	17.2		µg/l		20.0	86		70-130	6	20
1,1-Dichloropropene	20.7		µg/l		20.0	103		70-130	3	20
cis-1,3-Dichloropropene	20.3		µg/l		20.0	101		70-130	5	20
trans-1,3-Dichloropropene	20.3		µg/l		20.0	102		70-130	4	20
Ethylbenzene	19.4		µg/l		20.0	97		70-130	0.4	20
Hexachlorobutadiene	17.0		µg/l		20.0	85		70-130	0.2	20

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330918 - SW846 5030 Water MS										
<u>LCS Dup (1330918-BSD1)</u>										
<u>Prepared & Analyzed: 24-Dec-13</u>										
2-Hexanone (MBK)	17.6		µg/l		20.0	88	70-130	8	20	
Isopropylbenzene	21.3		µg/l		20.0	106	70-130	1	20	
4-Isopropyltoluene	18.2		µg/l		20.0	91	70-130	3	20	
Methyl tert-butyl ether	20.2		µg/l		20.0	101	70-130	9	20	
4-Methyl-2-pentanone (MIBK)	18.4		µg/l		20.0	92	70-130	9	20	
Methylene chloride	18.7		µg/l		20.0	93	70-130	4	20	
Naphthalene	18.6		µg/l		20.0	93	70-130	4	20	
n-Propylbenzene	19.0		µg/l		20.0	95	70-130	0.6	20	
Styrene	18.4		µg/l		20.0	92	70-130	1	20	
1,1,1,2-Tetrachloroethane	18.9		µg/l		20.0	94	70-130	0.8	20	
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0	110	70-130	6	20	
Tetrachloroethene	19.5		µg/l		20.0	98	70-130	9	20	
Toluene	20.6		µg/l		20.0	103	70-130	5	20	
1,2,3-Trichlorobenzene	18.1		µg/l		20.0	91	70-130	2	20	
1,2,4-Trichlorobenzene	17.6		µg/l		20.0	88	70-130	4	20	
1,3,5-Trichlorobenzene	17.9		µg/l		20.0	89	70-130	2	20	
1,1,1-Trichloroethane	18.9		µg/l		20.0	95	70-130	3	20	
1,1,2-Trichloroethane	19.9		µg/l		20.0	100	70-130	9	20	
Trichloroethene	20.4		µg/l		20.0	102	70-130	5	20	
Trichlorofluoromethane (Freon 11)	20.4		µg/l		20.0	102	70-130	3	20	
1,2,3-Trichloropropane	21.0		µg/l		20.0	105	70-130	7	20	
1,2,4-Trimethylbenzene	19.4		µg/l		20.0	97	70-130	2	20	
1,3,5-Trimethylbenzene	18.8		µg/l		20.0	94	70-130	3	20	
Vinyl chloride	18.5		µg/l		20.0	93	70-130	10	20	
m,p-Xylene	38.4		µg/l		40.0	96	70-130	1	20	
o-Xylene	19.1		µg/l		20.0	95	70-130	1	20	
Tetrahydrofuran	19.0		µg/l		20.0	95	70-130	9	20	
Ethyl ether	22.1		µg/l		20.0	110	70-130	5	20	
Tert-amyl methyl ether	18.8		µg/l		20.0	94	70-130	6	20	
Ethyl tert-butyl ether	20.1		µg/l		20.0	100	70-130	7	20	
Di-isopropyl ether	19.9		µg/l		20.0	99	70-130	6	20	
Tert-Butanol / butyl alcohol	214		µg/l		200	107	70-130	0.2	20	
1,4-Dioxane	241	QR5	µg/l		200	121	70-130	41	20	
trans-1,4-Dichloro-2-butene	17.1		µg/l		20.0	86	70-130	8	20	
Ethanol	441		µg/l		400	110	70-130	4	20	
Surrogate: 4-Bromofluorobenzene	51.4		µg/l		50.0	103	70-130			
Surrogate: Toluene-d8	50.2		µg/l		50.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	49.7		µg/l		50.0	99	70-130			
Surrogate: Dibromofluoromethane	51.9		µg/l		50.0	104	70-130			

This laboratory report is not valid without an authorized signature on the cover page.

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330961 - SW846 3005A										
<u>Blank (1330961-BLK1)</u>										
Manganese	< 0.0020		mg/l	0.0020						
Sodium	< 5.00		mg/l	5.00						
Iron	< 0.0150		mg/l	0.0150						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Barium	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
Lead	< 0.0075		mg/l	0.0075						
Zinc	< 0.0485		mg/l	0.0485						
Copper	< 0.0050		mg/l	0.0050						
Nickel	< 0.0050		mg/l	0.0050						
<u>LCS (1330961-BS1)</u>										
Iron	1.28		mg/l	0.0150	1.25	102	85-115			
Sodium	6.23		mg/l	5.00	6.25	100	85-115			
Manganese	1.30		mg/l	0.0020	1.25	104	85-115			
Zinc	1.19		mg/l	0.0485	1.25	95	85-115			
Lead	1.17		mg/l	0.0075	1.25	94	85-115			
Nickel	1.19		mg/l	0.0050	1.25	95	85-115			
Chromium	1.26		mg/l	0.0050	1.25	101	85-115			
Cadmium	1.19		mg/l	0.0025	1.25	96	85-115			
Barium	1.29		mg/l	0.0050	1.25	103	85-115			
Arsenic	1.24		mg/l	0.0040	1.25	99	85-115			
Copper	1.27		mg/l	0.0050	1.25	101	85-115			
<u>LCS Dup (1330961-BSD1)</u>										
Sodium	6.20		mg/l	5.00	6.25	99	85-115	0.6	20	
Iron	1.26		mg/l	0.0150	1.25	101	85-115	1	20	
Manganese	1.26		mg/l	0.0020	1.25	101	85-115	3	20	
Arsenic	1.26		mg/l	0.0040	1.25	100	85-115	2	20	
Barium	1.27		mg/l	0.0050	1.25	102	85-115	1	20	
Cadmium	1.21		mg/l	0.0025	1.25	97	85-115	1	20	
Chromium	1.22		mg/l	0.0050	1.25	98	85-115	3	20	
Zinc	1.21		mg/l	0.0485	1.25	97	85-115	1	20	
Lead	1.18		mg/l	0.0075	1.25	95	85-115	0.8	20	
Nickel	1.22		mg/l	0.0050	1.25	98	85-115	3	20	
Copper	1.27		mg/l	0.0050	1.25	102	85-115	0.2	20	
<u>Matrix Spike (1330961-MS1)</u>										
				Source: SB82197-02			Prepared: 26-Dec-13	Analyzed: 31-Dec-13		
Manganese	7.97	D	mg/l	0.0100	1.25	6.82	92	75-125		
Sodium	119	QM2	mg/l	5.00	6.25	109	154	75-125		
Iron	1.35		mg/l	0.0150	1.25	0.0604	103	75-125		
Nickel	1.16		mg/l	0.0050	1.25	0.0118	92	75-125		
Lead	1.14		mg/l	0.0075	1.25	BRL	91	75-125		
Arsenic	1.31		mg/l	0.0040	1.25	BRL	105	75-125		
Barium	1.42		mg/l	0.0050	1.25	0.101	106	75-125		
Cadmium	1.18		mg/l	0.0025	1.25	0.0010	94	75-125		
Chromium	1.24		mg/l	0.0050	1.25	0.0014	99	75-125		
Copper	1.29		mg/l	0.0050	1.25	0.0048	103	75-125		
Zinc	1.25		mg/l	0.0485	1.25	0.0782	93	75-125		
<u>Matrix Spike Dup (1330961-MSD1)</u>										
				Source: SB82197-02			Prepared: 26-Dec-13	Analyzed: 27-Dec-13		
Sodium	121	QM2	mg/l	5.00	6.25	109	193	75-125	2	20
Manganese	7.70	QM4X, D	mg/l	0.0100	1.25	6.82	71	75-125	3	20
Iron	1.34		mg/l	0.0150	1.25	0.0604	102	75-125	0.6	20

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330961 - SW846 3005A										
<u>Matrix Spike Dup (1330961-MSD1)</u>										
Zinc	1.26		mg/l	0.0485	1.25	0.0782	94	75-125	0.9	20
Lead	1.16		mg/l	0.0075	1.25	BRL	93	75-125	1	20
Nickel	1.18		mg/l	0.0050	1.25	0.0118	94	75-125	2	20
Chromium	1.25		mg/l	0.0050	1.25	0.0014	100	75-125	0.4	20
Arsenic	1.32		mg/l	0.0040	1.25	BRL	106	75-125	1	20
Cadmium	1.19		mg/l	0.0025	1.25	0.0010	95	75-125	1	20
Barium	1.43		mg/l	0.0050	1.25	0.101	106	75-125	0.5	20
Copper	1.31		mg/l	0.0050	1.25	0.0048	105	75-125	1	20
<u>Post Spike (1330961-PS1)</u>										
Iron	1.32		mg/l	0.0150	1.25	0.0604	101	80-120		
Manganese	7.78	QM4X, D	mg/l	0.0100	1.25	6.82	77	80-120		
Sodium	117	QM2	mg/l	5.00	6.25	109	126	80-120		
Zinc	1.24		mg/l	0.0485	1.25	0.0782	93	80-120		
Lead	1.14		mg/l	0.0075	1.25	BRL	91	80-120		
Nickel	1.17		mg/l	0.0050	1.25	0.0118	93	80-120		
Arsenic	1.31		mg/l	0.0040	1.25	BRL	105	80-120		
Chromium	1.22		mg/l	0.0050	1.25	0.0014	97	80-120		
Cadmium	1.17		mg/l	0.0025	1.25	0.0010	94	80-120		
Barium	1.40		mg/l	0.0050	1.25	0.101	104	80-120		
Copper	1.29		mg/l	0.0050	1.25	0.0048	103	80-120		

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330469 - General Preparation										
<u>Blank (1330469-BLK1)</u>										
Nitrite as N	< 0.100		mg/l	0.100		Prepared & Analyzed: 18-Dec-13				
Sulfate as SO4	< 1.00		mg/l	1.00						
Chloride	< 1.00		mg/l	1.00						
Nitrate as N	< 0.100		mg/l	0.100						
<u>LCS (1330469-BS1)</u>										
Nitrite as N	2.05		mg/l	0.100	2.00	102	90-110			
Sulfate as SO4	20.5		mg/l	1.00	20.0	103	90-110			
Chloride	20.1		mg/l	1.00	20.0	101	90-110			
Nitrate as N	1.99		mg/l	0.100	2.00	99	90-110			
<u>Reference (1330469-SRM1)</u>										
Chloride	24.9		mg/l	1.00	25.0	100	90-110			
Nitrite as N	2.58		mg/l	0.100	2.50	103	90-110			
Sulfate as SO4	24.8		mg/l	1.00	25.0	99	90-110			
Nitrate as N	2.58		mg/l	0.100	2.50	103	90-110			
Batch 1330534 - General Preparation										
<u>Blank (1330534-BLK1)</u>										
Ammonia as N	< 0.100		mg/l	0.100		Prepared: 19-Dec-13 Analyzed: 21-Dec-13				
<u>LCS (1330534-BS1)</u>										
Ammonia as N	2.28		mg/l	0.100	2.50	91	90-110			
<u>Reference (1330534-SRM1)</u>										
Ammonia as N	0.979		mg/l	0.100	1.04	94	84-116			
Batch 1330547 - General Preparation										
<u>Blank (1330547-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0		Prepared: 19-Dec-13 Analyzed: 20-Dec-13				
<u>LCS (1330547-BS1)</u>										
Total Suspended Solids	96.0		mg/l	10.0	100	96	90-110			
Batch 1330570 - General Preparation										
<u>Blank (1330570-BLK1)</u>										
Sulfate as SO4	< 1.00		mg/l	1.00		Prepared: 19-Dec-13 Analyzed: 20-Dec-13				
<u>LCS (1330570-BS1)</u>										
Sulfate as SO4	19.3		mg/l	1.00	20.0	96	90-110			
<u>Reference (1330570-SRM1)</u>										
Sulfate as SO4	25.1		mg/l	1.00	25.0	101	90-110			
Batch 1330741 - General Preparation										
<u>Blank (1330741-BLK1)</u>										
Total Dissolved Solids	< 5		mg/l	5		Prepared: 21-Dec-13 Analyzed: 23-Dec-13				
<u>LCS (1330741-BS1)</u>										
Total Dissolved Solids	938		mg/l	10	1000	94	90-110			
<u>Duplicate (1330741-DUP2)</u>										
Total Dissolved Solids	894		mg/l	5	885				1	20
Batch 1331013 - General Preparation										
<u>Blank (1331013-BLK1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500		Prepared: 26-Dec-13 Analyzed: 27-Dec-13				
<u>Blank (1331013-BLK2)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500		Prepared: 26-Dec-13 Analyzed: 27-Dec-13				
<u>LCS (1331013-BS1)</u>										
Cyanide (total)	0.305		mg/l	0.00500	0.300	102	90-110			
<u>LCS (1331013-BS2)</u>										
Cyanide (total)	0.273		mg/l	0.00500	0.300	91	90-110			

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
Batch 1331013 - General Preparation											
<u>Reference (1331013-SRM1)</u>											
Cyanide (total)	0.142		mg/l	0.00500	0.168		85	74.9-125			
<u>Prepared: 26-Dec-13 Analyzed: 27-Dec-13</u>											
Batch 1331033 - General Preparation											
<u>Blank (1331033-BLK1)</u>											
Total Organic Carbon	< 1.00		mg/l	1.00			<u>Prepared & Analyzed: 23-Dec-13</u>				
<u>LCS (1331033-BS1)</u>											
Total Organic Carbon	16.0		mg/l	1.00	15.0		106	85-115			
<u>Calibration Blank (1331033-CCB1)</u>											
Total Organic Carbon	0.273		mg/l				<u>Prepared & Analyzed: 23-Dec-13</u>				
<u>Calibration Blank (1331033-CCB2)</u>											
Total Organic Carbon	0.292		mg/l				<u>Prepared & Analyzed: 23-Dec-13</u>				
<u>Calibration Blank (1331033-CCB3)</u>											
Total Organic Carbon	0.327		mg/l				<u>Prepared & Analyzed: 23-Dec-13</u>				
<u>Calibration Blank (1331033-CCB4)</u>											
Total Organic Carbon	0.330		mg/l				<u>Prepared & Analyzed: 23-Dec-13</u>				
<u>Calibration Blank (1331033-CCB5)</u>											
Total Organic Carbon	0.299		mg/l				<u>Prepared & Analyzed: 23-Dec-13</u>				
<u>Calibration Check (1331033-CCV1)</u>											
Total Organic Carbon	4.84		mg/l	1.00	5.00		97	85-115			
<u>Calibration Check (1331033-CCV2)</u>											
Total Organic Carbon	5.11		mg/l	1.00	5.00		102	85-115			
<u>Calibration Check (1331033-CCV3)</u>											
Total Organic Carbon	4.81		mg/l	1.00	5.00		96	85-115			
<u>Calibration Check (1331033-CCV4)</u>											
Total Organic Carbon	4.95		mg/l	1.00	5.00		99	85-115			
<u>Calibration Check (1331033-CCV5)</u>											
Total Organic Carbon	4.96		mg/l	1.00	5.00		99	85-115			
<u>Duplicate (1331033-DUP1)</u>											
Total Organic Carbon	3.32		mg/l	1.00		3.40			2	20	
<u>Matrix Spike (1331033-MS1)</u>											
Total Organic Carbon	9.24		mg/l	1.00	5.00	4.69	91	70-130			
<u>Reference (1331033-SRM1)</u>											
Total Organic Carbon	8.19		mg/l	1.00	8.20		100	87-113			
<u>Prepared & Analyzed: 23-Dec-13</u>											

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 262947A - 262947										
<u>BLK (BF90788-BLK)</u>						<u>Source: SB82197-02</u>				
Phenolics	< 0.015		mg/L	0.015					-	
<u>DUP (BF90788-DUP)</u>						<u>Source: SB82197-02</u>				
Phenolics	ND		mg/L				BRL	-	0	20
<u>LCS (BF90788-LCS)</u>						<u>Source: SB82197-02</u>				
Phenolics	ND		mg/L				96.2	70-130		20
<u>MS (BF90788-MS)</u>						<u>Source: SB82197-02</u>				
Phenolics	ND		mg/L				98.5	70-130		20
Batch 263250A - 263250										
<u>BLK (BF92186-BLK)</u>						<u>Source: BF92186</u>				
Phenolics	< 0.015		mg/L	0.015					-	
<u>DUP (BF92186-DUP)</u>						<u>Source: BF92186</u>				
Phenolics	ND		mg/L				0.019	-	0	20
<u>LCS (BF92186-LCS)</u>						<u>Source: BF92186</u>				
Phenolics	ND		mg/L				107	70-130		20
<u>MS (BF92186-MS)</u>						<u>Source: BF92186</u>				
Phenolics	ND		mg/L				96.0	70-130		20

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Notes and Definitions

D	Data reported from a dilution
E	This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM4X	The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR5	RPD out of acceptance range.
R06	IMRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
LIV	The initial volume for this sample has been reduced due to sample matrix and/or historical data therefore elevating the reporting limit.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Kimberly Wisk



CHAIN OF CUSTODY RECORD

SB 82197 By ✓

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Page 1 of 1

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Invoice To: Kris Sibinga
Envirite Corporation
PO Box 591
Chappaqua, NY 10514

Telephone #: 603-703-5534
Project Mgr. John Noble

P.O. No.: RQN: 7694

Project No.: 08-14218 G2

Site Name: Envirite RCRA Landfill

Location: Thomaston State: CT
Sampler(s): Luke C / John V

List preservative code below:

2 10 5 4 3

QA/QC Reporting Notes:

* additional charges may apply

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= Trip Blank X2= X3=

MA DEP MCP CAM Report: Yes No
CT DPH RCP Report: Yes No

QA/QC Reporting Level

- Standard No QC DQA*
- NY ASP A* NY ASP B*
- NJ Reduced* NJ Full*
- TIER II* TIER IV*
- Other CT RCP CT RSRs

State-specific reporting standards:

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:				Analyses:
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	
82197_01	TB-20131218	12/18/13	0800	G	X1	1				Total Cyanide As, Ba, Cd, Cr, Cu, Fe, Pb, Mn, Na, Ni, Zn Ammonia as N, Tet, Phenolics Nitrite as N Nitrate as N
02	MW-505/20131218		0830		GW	5	1	5		X X X X X X X X X X
03	MW-53D/20131218		0850			5	1	5		X X X X X X X X X X
04	MW-51B/20131218		1130			5	1	5		X X X X X X X X X X
05	MW-51D/20131218		1130			5	1	5		X X X X X X X X X X
✓ 06	MW-42B/20131218	12/18/13	1420	G	GW	5	1	5		X X X X X X X X X X

031-11-01R02
12/18/13 0X

Relinquished by:

Received by:

Date: Time: Temp°C

12-14-13 3:10
12/18/13 1711

EDD Format Environ Equis 4-File

E-mail to jnoble@environecorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

Report Date:
03-Jan-14 17:22

- Final Report
 Re-Issued Report
 Revised Report



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Laboratory Report

ENVIRON International Corporation
3 Carlisle Rd
Westford, MA 01886
Attn: John Noble

Project: Envirite RCRA Landfill - Thomaston, CT
Project #: 08-14218G2

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB82287-01	MW-30/20131218	Ground Water	18-Dec-13 14:35	19-Dec-13 16:45
SB82287-02	TB-20131219	Trip Blank	19-Dec-13 08:00	19-Dec-13 16:45
SB82287-03	MW-63/20131219	Ground Water	19-Dec-13 09:00	19-Dec-13 16:45
SB82287-04	MW-32S/20131219	Ground Water	19-Dec-13 11:00	19-Dec-13 16:45
SB82287-05	MW-61S/20131219	Ground Water	19-Dec-13 13:15	19-Dec-13 16:45
SB82287-06	MW-55B/20131219	Ground Water	19-Dec-13 08:40	19-Dec-13 16:45
SB82287-07	MW-61S/20131219F	Ground Water	19-Dec-13 13:15	19-Dec-13 16:45
SB82287-08	MW-32D/20131219	Ground Water	19-Dec-13 11:00	19-Dec-13 16:45
SB82287-09	MW-61B/20131219	Ground Water	19-Dec-13 13:05	19-Dec-13 16:45
SB82287-10	EB-20131218	Equipment Blank	18-Dec-13 10:00	19-Dec-13 16:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435



Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 67 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Project Location: Envirite RCRA Landfill - Thomaston, CT

Sampling Date(s):

12/18/2013 through 12/19/2013

RCP Methods Used:

EPA 200.7/3005A/6010

EPA 335.4 / SW846 9012B

SW846 6010C

SW846 8260C

Client: ENVIRON International Corporation - Westford, MA

Project Number: 08-14218G2

Laboratory Sample ID(s):

SB82287-01 through SB82287-10

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes	No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes	No
1B	<i>VPH and EPH methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes	No
3	Were samples received at an appropriate temperature?	<input checked="" type="checkbox"/> Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	<input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes Yes	<input checked="" type="checkbox"/> No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes	<input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja
 Laboratory Director
 Date: 1/3/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 1.8 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

According to CTDEP RCP Quality Assurance and Quality Control Requirements for VOCs by method 8260, SW-846 version 1, 7/28/05 Table 1A, recovery for some VOC analytes have been deemed potentially difficult.

For this work order, the reporting limits have not been referenced or specified.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 300.0

Samples:

SB82287-01 MW-30/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

The Reporting Limit has been raised to account for matrix interference.

Nitrite as N

SB82287-03 MW-63/20131219

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

The Reporting Limit has been raised to account for matrix interference.

Nitrate as N
Nitrite as N
Sulfate as SO₄

SB82287-04 MW-32S/20131219

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EPA 300.0

Samples:

SB82287-04 MW-32S/20131219

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

The Reporting Limit has been raised to account for matrix interference.

Nitrate as N

Nitrite as N

Sulfate as SO₄

SB82287-05 MW-61S/20131219

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

The Reporting Limit has been raised to account for matrix interference.

Nitrate as N

Nitrite as N

Sulfate as SO₄

SB82287-08 MW-32D/20131219

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

The Reporting Limit has been raised to account for matrix interference.

Nitrate as N

Nitrite as N

Sulfate as SO₄

SB82287-09 MW-61B/20131219

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

Sulfate as SO₄

The Reporting Limit has been raised to account for matrix interference.

Nitrate as N

Nitrite as N

SW846 6010C

Spikes:

1331108-MS1 Source: SB82287-01

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

1331109-PS1 Source: SB82287-07

The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

Sodium

Duplicates:

SW846 6010C

Duplicates:

1331108-DUP1 *Source: SB82287-01*

IMRL raised to correlate to batch QC reporting limits.

Zinc

1331109-DUP1 *Source: SB82287-07*

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Nickel

Samples:

SB82287-01 *MW-30/20131218*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-03 *MW-63/20131219*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-04 *MW-32S/20131219*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-05 *MW-61S/20131219*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-06 *MW-55B/20131219*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-08 *MW-32D/20131219*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-09 *MW-61B/20131219*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82287-10 *EB-20131218*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SW846 8260C

Calibration:

1312068

SW846 8260C

Calibration:

1312068

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2-Dibromo-3-chloropropane
1,3,5-Trichlorobenzene
2-Hexanone (MBK)
Acetone
Bromoform
cis-1,3-Dichloropropene
Dibromochloromethane
Hexachlorobutadiene
Naphthalene
n-Butylbenzene
trans-1,3-Dichloropropene

This affected the following samples:

1331099-BLK1
1331099-BS1
1331099-BSD1
1331099-MS1
1331099-MSD1
MW-30/20131218
MW-63/20131219
S315747-CCV1

1312089

Analyte quantified by quadratic equation type calibration.

1,1,2-Trichlorotrifluoroethane (Freon 113)
1,2,3-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trichlorobenzene
1,3,5-Trimethylbenzene
Naphthalene
n-Butylbenzene
n-Propylbenzene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Vinyl chloride

SW846 8260C

Calibration:

1312089

This affected the following samples:

1330978-BLK1
1330978-BS1
1330978-BSD1
1330978-MS1
1330978-MSD1
EB-20131218
MW-32D/20131219
MW-32S/20131219
MW-55B/20131219
MW-61B/20131219
MW-61S/20131219
MW-63/20131219
S315715-ICV1
S315716-CCV1
TB-20131219

S315715-ICV1

Analyte percent recovery is outside individual acceptance criteria.

2,2-Dichloropropane (78%)

This affected the following samples:

1330978-BLK1
1330978-BS1
1330978-BSD1
1330978-MS1
1330978-MSD1
EB-20131218
MW-32D/20131219
MW-32S/20131219
MW-55B/20131219
MW-61B/20131219
MW-61S/20131219
MW-63/20131219
S315716-CCV1
TB-20131219

Laboratory Control Samples:

1330978 BS/BSD

1,2-Dibromo-3-chloropropane percent recoveries (61/62) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

EB-20131218
MW-32D/20131219
MW-32S/20131219
MW-55B/20131219
MW-61B/20131219
MW-61S/20131219
MW-63/20131219
TB-20131219

SW846 8260C

Laboratory Control Samples:

1330978 BS/BSD

Bromoform percent recoveries (63/58) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

EB-20131218
MW-32D/20131219
MW-32S/20131219
MW-55B/20131219
MW-61B/20131219
MW-61S/20131219
MW-63/20131219
TB-20131219

Dibromochloromethane percent recoveries (68/67) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

EB-20131218
MW-32D/20131219
MW-32S/20131219
MW-55B/20131219
MW-61B/20131219
MW-61S/20131219
MW-63/20131219
TB-20131219

1331099 BS/BSD

2,2-Dichloropropane percent recoveries (136/136) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-30/20131218
MW-63/20131219

Ethyl tert-butyl ether percent recoveries (134/134) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-30/20131218
MW-63/20131219

Tert-Butanol / butyl alcohol percent recoveries (134/119) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-30/20131218
MW-63/20131219

Spikes:

1330978-MS1 *Source: SB82287-03*

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

1,2-Dibromo-3-chloropropane
Bromoform
Dibromochloromethane

1330978-MSD1 *Source: SB82287-03*

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

1,2-Dibromo-3-chloropropane
Bromoform
Dibromochloromethane

1331099-MS1 *Source: SB82287-03RE1*

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SW846 8260C

Spikes:

1331099-MS1 *Source: SB82287-03RE1*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,1,2,2-Tetrachloroethane
1,1-Dichloroethene
1,1-Dichloropropene
Benzene
Bromomethane
Carbon disulfide
Chloroethane
Chloromethane
Dichlorodifluoromethane (Freon12)
Ethyl ether
Methylene chloride
trans-1,2-Dichloroethene
Trichlorofluoromethane (Freon 11)
Vinyl chloride

1331099-MSD1 *Source: SB82287-03RE1*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,1-Dichloroethene
1,1-Dichloropropene
Benzene
Bromomethane
Carbon disulfide
Chloroethane
Chloromethane
Dichlorodifluoromethane (Freon12)
Ethyl ether
Methylene chloride
trans-1,2-Dichloroethene
Trichlorofluoromethane (Freon 11)
Vinyl chloride

Samples:

S315716-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1,2-Tetrachloroethane (-20.5%)
2,2-Dichloropropane (-26.6%)
Bromodichloromethane (-24.7%)
Bromoform (-36.9%)
Carbon tetrachloride (-24.2%)
cis-1,3-Dichloropropene (-21.3%)
Dibromochloromethane (-31.6%)
trans-1,3-Dichloropropene (-23.8%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,2-Dibromo-3-chloropropane (-38.6%)
Carbon disulfide (-25.0%)

SW846 8260C

Samples:

S315716-CCV1

This affected the following samples:

1330978-BLK1
1330978-BS1
1330978-BSD1
1330978-MS1
1330978-MSD1
EB-20131218
MW-32D/20131219
MW-32S/20131219
MW-55B/20131219
MW-61B/20131219
MW-61S/20131219
MW-63/20131219
TB-20131219

S315747-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1-Trichloroethane (20.4%)
2,2-Dichloropropane (35.9%)
Carbon tetrachloride (20.1%)
Ethyl tert-butyl ether (34.5%)
Methyl tert-butyl ether (24.9%)
Tert-Butanol / butyl alcohol (33.8%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Tert-amyl methyl ether (25.0%)
trans-1,3-Dichloropropene (21.7%)

This affected the following samples:

1331099-BLK1
1331099-BS1
1331099-BSD1
1331099-MS1
1331099-MSD1
MW-30/20131218
MW-63/20131219

SB82287-01 MW-30/20131218

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82287-03 MW-63/20131219

Sample data reported for QC purposes only.

Sample Acceptance Check Form

Client: ENVIRON International Corporation - Westford, MA
Project: Envirite RCRA Landfill - Thomaston, CT / 08-14218G2
Work Order: SB82287
Sample(s) received on: 12/19/2013
Received by: Vickie Knowles

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
1. Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were samples refrigerated upon transfer to laboratory representative?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

MW-30/20131218

SB82287-01

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 14:35

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 25.0	D	µg/l	25.0	16.2	25	SW846 8260C	27-Dec-13	27-Dec-13	naa	1331099	X
67-64-1	Acetone	< 250	D	µg/l	250	64.0	25	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 12.5	D	µg/l	12.5	11.9	25	"	"	"	"	"	X
71-43-2	Benzene	< 25.0	D	µg/l	25.0	16.7	25	"	"	"	"	"	X
108-86-1	Bromobenzene	< 25.0	D	µg/l	25.0	18.0	25	"	"	"	"	"	X
74-97-5	Bromoform	< 25.0	D	µg/l	25.0	17.8	25	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 12.5	D	µg/l	12.5	12.0	25	"	"	"	"	"	X
75-25-2	Bromoform	< 25.0	D	µg/l	25.0	15.1	25	"	"	"	"	"	X
74-83-9	Bromomethane	< 50.0	D	µg/l	50.0	28.5	25	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 250	D	µg/l	250	48.4	25	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 25.0	D	µg/l	25.0	14.0	25	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 25.0	D	µg/l	25.0	20.5	25	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 25.0	D	µg/l	25.0	18.6	25	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 50.0	D	µg/l	50.0	32.0	25	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 25.0	D	µg/l	25.0	13.7	25	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 25.0	D	µg/l	25.0	16.4	25	"	"	"	"	"	X
75-00-3	Chloroethane	< 50.0	D	µg/l	50.0	25.0	25	"	"	"	"	"	X
67-66-3	Chloroform	< 25.0	D	µg/l	25.0	17.2	25	"	"	"	"	"	X
74-87-3	Chloromethane	< 50.0	D	µg/l	50.0	36.8	25	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 25.0	D	µg/l	25.0	19.8	25	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 25.0	D	µg/l	25.0	18.3	25	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 50.0	D	µg/l	50.0	30.0	25	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 12.5	D	µg/l	12.5	8.58	25	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 12.5	D	µg/l	12.5	9.02	25	"	"	"	"	"	X
74-95-3	Dibromomethane	< 25.0	D	µg/l	25.0	16.6	25	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 25.0	D	µg/l	25.0	16.7	25	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 25.0	D	µg/l	25.0	17.8	25	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 25.0	D	µg/l	25.0	15.6	25	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 50.0	D	µg/l	50.0	11.2	25	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 25.0	D	µg/l	25.0	17.0	25	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 25.0	D	µg/l	25.0	19.5	25	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 25.0	D	µg/l	25.0	12.2	25	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	1,030	D	µg/l	25.0	17.9	25	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 25.0	D	µg/l	25.0	20.8	25	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 25.0	D	µg/l	25.0	19.3	25	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 25.0	D	µg/l	25.0	20.2	25	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 25.0	D	µg/l	25.0	21.8	25	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 25.0	D	µg/l	25.0	15.9	25	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 12.5	D	µg/l	12.5	9.10	25	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 12.5	D	µg/l	12.5	12.5	25	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 25.0	D	µg/l	25.0	23.8	25	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 12.5	D	µg/l	12.5	12.2	25	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 250	D	µg/l	250	16.4	25	"	"	"	"	"	X

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Sample Identification

MW-30/20131218

SB82287-01

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 14:35

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
GS1													
98-82-8	Isopropylbenzene	< 25.0	D	µg/l	25.0	15.5	25	SW846 8260C	27-Dec-13	27-Dec-13	naa	1331099	X
99-87-6	4-Isopropyltoluene	< 25.0	D	µg/l	25.0	15.2	25	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 25.0	D	µg/l	25.0	16.3	25	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 250	D	µg/l	250	69.0	25	"	"	"	"	"	X
75-09-2	Methylene chloride	< 50.0	D	µg/l	50.0	23.7	25	"	"	"	"	"	X
91-20-3	Naphthalene	< 25.0	D	µg/l	25.0	14.5	25	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 25.0	D	µg/l	25.0	19.0	25	"	"	"	"	"	X
100-42-5	Styrene	< 25.0	D	µg/l	25.0	15.4	25	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 25.0	D	µg/l	25.0	16.8	25	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 12.5	D	µg/l	12.5	7.92	25	"	"	"	"	"	X
127-18-4	Tetrachloroethene	117	D	µg/l	25.0	18.6	25	"	"	"	"	"	X
108-88-3	Toluene	< 25.0	D	µg/l	25.0	20.3	25	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 25.0	D	µg/l	25.0	9.40	25	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 25.0	D	µg/l	25.0	9.00	25	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 25.0	D	µg/l	25.0	19.6	25	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 25.0	D	µg/l	25.0	14.6	25	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 25.0	D	µg/l	25.0	16.0	25	"	"	"	"	"	X
79-01-6	Trichloroethene	319	D	µg/l	25.0	18.9	25	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 25.0	D	µg/l	25.0	15.7	25	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 25.0	D	µg/l	25.0	18.4	25	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 25.0	D	µg/l	25.0	18.9	25	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 25.0	D	µg/l	25.0	18.6	25	"	"	"	"	"	X
75-01-4	Vinyl chloride	106	D	µg/l	25.0	20.2	25	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 50.0	D	µg/l	50.0	41.0	25	"	"	"	"	"	X
95-47-6	o-Xylene	< 25.0	D	µg/l	25.0	22.0	25	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 50.0	D	µg/l	50.0	36.0	25	"	"	"	"	"	X
60-29-7	Ethyl ether	< 25.0	D	µg/l	25.0	17.3	25	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 25.0	D	µg/l	25.0	18.0	25	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 25.0	D	µg/l	25.0	19.6	25	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 25.0	D	µg/l	25.0	18.2	25	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 250	D	µg/l	250	216	25	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 500	D	µg/l	500	300	25	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 125	D	µg/l	125	18.4	25	"	"	"	"	"	X
64-17-5	Ethanol	< 10000	D	µg/l	10000	875	25	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	95			70-130 %		"	"	"	"	"	"	
2037-26-5	Toluene-d8	100			70-130 %		"	"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	110			70-130 %		"	"	"	"	"	"	
1868-53-7	Dibromofluoromethane	113			70-130 %		"	"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A		1	EPA 200/6000 methods				BJW	1330698	

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Sample Identification

MW-30/20131218

SB82287-01

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

18-Dec-13 14:35

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0087		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0060		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.284		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.255		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	76.4		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	0.0084		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0334	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	2.72		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	540	GS1, D	mg/l	40.0	4.96	40	EPA 300.0	19-Dec-13	19-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	97.2	GS1, D	mg/l	4.00	0.840	40	EPA 300.0	19-Dec-13 17:45	19-Dec-13 19:03	ELE	1330605	X
14797-65-0	Nitrite as N	< 1.00	R01, D	mg/l	1.00	0.990	10	"	19-Dec-13 17:45	19-Dec-13 18:43	"	"	X
	Total Dissolved Solids	2,730	LIV	mg/l	10	5	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	20-Dec-13	23-Dec-13	BD	1330681	X
14808-79-8	Sulfate as SO4	868	GS1, D	mg/l	40.0	14.1	40	EPA 300.0	19-Dec-13	19-Dec-13	ELE	1330605	X
	Total Organic Carbon	5.94		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	129		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	['none']
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

TB-20131219

SB82287-02

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

19-Dec-13 08:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

TB-20131219

SB82287-02

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

19-Dec-13 08:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	90	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	100	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	101	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	91	70-130 %	"	"	"	"	"	"	"	"	"	"

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Sample Identification

MW-63/20131219

SB82287-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 09:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 50.0	D	µg/l	50.0	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromoform	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	"	"	"	"	"	X

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Sample Identification

MW-63/20131219

SB82287-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 09:00

Received

19-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	91	70-130 %	"	"	"	"	"
2037-26-5	Toluene-d8	98	70-130 %	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	96	70-130 %	"	"	"	"	"
1868-53-7	Dibromofluoromethane	90	70-130 %	"	"	"	"	"

Re-analysis of Volatile Organic Compounds by SW846

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-63/20131219

SB82287-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 09:00

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19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	naa	1331099	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X

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Sample Identification

MW-63/20131219

SB82287-03

Client Project #

08-14218G2

Matrix

Ground Water

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19-Dec-13 09:00

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19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	SW846 8260C	27-Dec-13	27-Dec-13	naa	1331099	X
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromo fluorobenzene	97	70-130 %	"	"	"	"
2037-26-5	Toluene-d8	101	70-130 %	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	110	70-130 %	"	"	"	"
1868-53-7	Dibromofluoromethane	117	70-130 %	"	"	"	"

Total Metals by EPA 200/6000 Series Methods

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Sample Identification

MW-63/20131219

SB82287-03

Client Project #

08-14218G2

Matrix

Ground Water

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<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			BJW	1330698	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0604		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0664		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0041		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	126		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0344	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	208	GS1, D	mg/l	10.0	1.24	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	1.06	R01, D	mg/l	1.00	0.210	10	EPA 300.0	19-Dec-13 17:45	20-Dec-13 08:49	ELE	1330605	X
14797-65-0	Nitrite as N	< 1.00	R01, D	mg/l	1.00	0.990	10	"	19-Dec-13 17:45	20-Dec-13 08:49	"	"	X
	Total Dissolved Solids	437		mg/l	5	3	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	20-Dec-13	23-Dec-13	BD	1330681	X
14808-79-8	Sulfate as SO4	30.3	R01, D	mg/l	10.0	3.53	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
	Total Organic Carbon	1.66		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-32S/20131219

SB82287-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 11:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-32S/20131219

SB82287-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 11:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	90	70-130 %										
2037-26-5	Toluene-d8	99	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	98	70-130 %										
1868-53-7	Dibromofluoromethane	90	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330698
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Sample Identification

MW-32S/20131219

SB82287-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 11:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0576		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0038		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	113		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0288	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	187	GS1, D	mg/l	10.0	1.24	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	1.16	R01, D	mg/l	1.00	0.210	10	EPA 300.0	19-Dec-13	20-Dec-13 17:45	ELE	1330605	X
14797-65-0	Nitrite as N	< 1.00	R01, D	mg/l	1.00	0.990	10	"	19-Dec-13	20-Dec-13 17:45	"	"	X
	Total Dissolved Solids	376		mg/l	5	3	1	SM2540C	21-Dec-13	23-Dec-13	BD	1330741	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	23.6	R01, D	mg/l	10.0	3.53	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
	Total Organic Carbon	1.60		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-61S/20131219

SB82287-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:15

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-61S/20131219

SB82287-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:15

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	91		70-130 %									
2037-26-5	Toluene-d8	99		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	100		70-130 %									
1868-53-7	Dibromofluoromethane	92		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330698
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Sample Identification

MW-61S/20131219

SB82287-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:15

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0420		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.620		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0078		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	54.6		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0075	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	80.5	GS1, D	mg/l	2.00	0.248	2	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	1.03	R01, D	mg/l	0.200	0.0420	2	EPA 300.0	19-Dec-13 17:45	20-Dec-13 10:53	ELE	1330605	X
14797-65-0	Nitrite as N	< 0.200	R01, D	mg/l	0.200	0.198	2	"	19-Dec-13 17:45	20-Dec-13 10:53	"	"	X
	Total Dissolved Solids	190		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	12.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	23.1	R01, D	mg/l	2.00	0.706	2	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
	Total Organic Carbon	2.30		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-55B/20131219

SB82287-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 08:40

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-55B/20131219

SB82287-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 08:40

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	89	70-130 %										
2037-26-5	Toluene-d8	100	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	100	70-130 %										
1868-53-7	Dibromofluoromethane	92	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330698

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Sample Identification

MW-55B/20131219

SB82287-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 08:40

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0414		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.226		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0081		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	18.2		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0194	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	38.1		mg/l	1.00	0.124	1	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	0.156		mg/l	0.100	0.0210	1	EPA 300.0	19-Dec-13	20-Dec-13 17:45	ELE	1330605	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	19-Dec-13	20-Dec-13 17:45	"	"	X
	Total Dissolved Solids	109		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	10.5		mg/l	1.00	0.353	1	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
	Total Organic Carbon	1.58		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-61S/20131219F

SB82287-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:15

Received

19-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Soluble Metals by EPA 200/6000 Series Methods													
	Filtration		Field Filtered	N/A			1	EPA 200.7/3005A/6010			CPA	1330618	
Soluble Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	27-Dec-13	31-Dec-13	TBC	1331109	X
7440-39-3	Barium	0.0401		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	02-Jan-14	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	< 0.0020		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	57.0		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X

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Sample Identification

MW-32D/20131219

SB82287-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 11:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-32D/20131219

SB82287-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 11:00

Received

19-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	89	70-130 %										
2037-26-5	Toluene-d8	101	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	101	70-130 %										
1868-53-7	Dibromofluoromethane	91	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330698
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Sample Identification

MW-32D/20131219

SB82287-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 11:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0664		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0025		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	117		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0136	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	197	GS1, D	mg/l	10.0	1.24	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	1.10	R01, D	mg/l	1.00	0.210	10	EPA 300.0	19-Dec-13	20-Dec-13 17:45	ELE	1330605	X
14797-65-0	Nitrite as N	< 1.00	R01, D	mg/l	1.00	0.990	10	"	19-Dec-13	20-Dec-13 17:45	"	"	X
	Total Dissolved Solids	370		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	23.1	R01, D	mg/l	10.0	3.53	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
	Total Organic Carbon	1.45		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-61B/20131219

SB82287-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:05

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-61B/20131219

SB82287-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:05

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	90	70-130 %										
2037-26-5	Toluene-d8	102	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	102	70-130 %										
1868-53-7	Dibromofluoromethane	94	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330698
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Sample Identification

MW-61B/20131219

SB82287-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 13:05

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	0.0070		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0191		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0023		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	28.0		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0083	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	94.0	GS1, D	mg/l	10.0	1.24	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	1.96	R01, D	mg/l	1.00	0.210	10	EPA 300.0	19-Dec-13	20-Dec-13 17:45	ELE	1330605	X
14797-65-0	Nitrite as N	< 1.00	R01, D	mg/l	1.00	0.990	10	"	19-Dec-13	20-Dec-13 17:45	"	"	X
	Total Dissolved Solids	391		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	78.1	GS1, D	mg/l	10.0	3.53	10	EPA 300.0	19-Dec-13	20-Dec-13	ELE	1330605	X
	Total Organic Carbon	1.76		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

EB-20131218

SB82287-10

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

18-Dec-13 10:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

EB-20131218

SB82287-10

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

18-Dec-13 10:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	27-Dec-13	SJB	1330978	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	90	70-130 %										
2037-26-5	Toluene-d8	101	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	101	70-130 %										
1868-53-7	Dibromofluoromethane	92	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	BJW	1330698
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Sample Identification

EB-20131218

SB82287-10

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

18-Dec-13 10:00

Received

19-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	02-Jan-14	edt	1331108	X
7440-39-3	Barium	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	< 0.0020		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	< 0.250		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0075	R06	mg/l	0.0075	0.0020	1	"	"	03-Jan-14	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	20-Dec-13	21-Dec-13	RLT	1330662	X
16887-00-6	Chloride	< 1.00		mg/l	1.00	0.124	1	EPA 300.0	19-Dec-13	19-Dec-13	ELE	1330605	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	< 0.100		mg/l	0.100	0.0210	1	EPA 300.0	19-Dec-13 17:45	19-Dec-13 20:14	ELE	1330605	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	19-Dec-13 17:45	19-Dec-13 20:14	"	"	X
	Total Dissolved Solids	< 5		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	< 1.00		mg/l	1.00	0.353	1	EPA 300.0	19-Dec-13	19-Dec-13	ELE	1330605	X
	Total Organic Carbon	< 1.00		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			31-Dec-13	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330978 - SW846 5030 Water MS										
<u>Blank (1330978-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330978 - SW846 5030 Water MS										
<u>Blank (1330978-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	44.1		µg/l	50.0		88		70-130		
Surrogate: Toluene-d8	50.9		µg/l	50.0		102		70-130		
Surrogate: 1,2-Dichloroethane-d4	50.6		µg/l	50.0		101		70-130		
Surrogate: Dibromofluoromethane	46.5		µg/l	50.0		93		70-130		
<u>LCS (1330978-BS1)</u>										
Prepared & Analyzed: 26-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.1		µg/l	20.0		105		70-130		
Acetone	20.9		µg/l	20.0		104		70-130		
Acrylonitrile	18.3		µg/l	20.0		92		70-130		
Benzene	21.3		µg/l	20.0		106		70-130		
Bromobenzene	19.4		µg/l	20.0		97		70-130		
Bromoform	12.6	QC2	µg/l	20.0		75		70-130		
Bromomethane	22.9		µg/l	20.0		115		70-130		
2-Butanone (MEK)	21.9		µg/l	20.0		109		70-130		
n-Butylbenzene	21.7		µg/l	20.0		109		70-130		
sec-Butylbenzene	21.4		µg/l	20.0		107		70-130		
tert-Butylbenzene	21.3		µg/l	20.0		106		70-130		
Carbon disulfide	15.0		µg/l	20.0		75		70-130		
Carbon tetrachloride	15.2		µg/l	20.0		76		70-130		
Chlorobenzene	19.7		µg/l	20.0		98		70-130		
Chloroethane	19.7		µg/l	20.0		99		70-130		
Chloroform	18.5		µg/l	20.0		93		70-130		
Chloromethane	18.8		µg/l	20.0		94		70-130		
2-Chlorotoluene	22.4		µg/l	20.0		112		70-130		
4-Chlorotoluene	21.9		µg/l	20.0		110		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330978 - SW846 5030 Water MS										
<u>LCS (1330978-BS1)</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
1,2-Dibromo-3-chloropropane	12.3	QC2	µg/l		20.0	61	70-130			
Dibromochloromethane	13.7	QC2	µg/l		20.0	68	70-130			
1,2-Dibromoethane (EDB)	19.1		µg/l		20.0	96	70-130			
Dibromomethane	19.5		µg/l		20.0	97	70-130			
1,2-Dichlorobenzene	20.1		µg/l		20.0	100	70-130			
1,3-Dichlorobenzene	21.0		µg/l		20.0	105	70-130			
1,4-Dichlorobenzene	18.5		µg/l		20.0	93	70-130			
Dichlorodifluoromethane (Freon12)	17.9		µg/l		20.0	89	70-130			
1,1-Dichloroethane	18.6		µg/l		20.0	93	70-130			
1,2-Dichloroethane	19.0		µg/l		20.0	95	70-130			
1,1-Dichloroethene	18.3		µg/l		20.0	92	70-130			
cis-1,2-Dichloroethene	19.1		µg/l		20.0	96	70-130			
trans-1,2-Dichloroethene	17.3		µg/l		20.0	87	70-130			
1,2-Dichloropropane	19.3		µg/l		20.0	96	70-130			
1,3-Dichloropropane	19.7		µg/l		20.0	99	70-130			
2,2-Dichloropropane	14.7		µg/l		20.0	73	70-130			
1,1-Dichloropropene	21.5		µg/l		20.0	107	70-130			
cis-1,3-Dichloropropene	15.7		µg/l		20.0	79	70-130			
trans-1,3-Dichloropropene	15.2		µg/l		20.0	76	70-130			
Ethylbenzene	23.1		µg/l		20.0	115	70-130			
Hexachlorobutadiene	19.6		µg/l		20.0	98	70-130			
2-Hexanone (MBK)	20.7		µg/l		20.0	103	70-130			
Isopropylbenzene	22.3		µg/l		20.0	112	70-130			
4-Isopropyltoluene	23.1		µg/l		20.0	116	70-130			
Methyl tert-butyl ether	19.6		µg/l		20.0	98	70-130			
4-Methyl-2-pentanone (MIBK)	20.8		µg/l		20.0	104	70-130			
Methylene chloride	20.2		µg/l		20.0	101	70-130			
Naphthalene	20.3		µg/l		20.0	101	70-130			
n-Propylbenzene	21.4		µg/l		20.0	107	70-130			
Styrene	21.1		µg/l		20.0	105	70-130			
1,1,1,2-Tetrachloroethane	15.9		µg/l		20.0	80	70-130			
1,1,2,2-Tetrachloroethane	22.0		µg/l		20.0	110	70-130			
Tetrachloroethene	21.2		µg/l		20.0	106	70-130			
Toluene	20.7		µg/l		20.0	103	70-130			
1,2,3-Trichlorobenzene	20.7		µg/l		20.0	104	70-130			
1,2,4-Trichlorobenzene	21.2		µg/l		20.0	106	70-130			
1,3,5-Trichlorobenzene	20.3		µg/l		20.0	101	70-130			
1,1,1-Trichloroethane	16.6		µg/l		20.0	83	70-130			
1,1,2-Trichloroethane	19.5		µg/l		20.0	97	70-130			
Trichloroethene	17.8		µg/l		20.0	89	70-130			
Trichlorofluoromethane (Freon 11)	18.9		µg/l		20.0	95	70-130			
1,2,3-Trichloropropane	19.5		µg/l		20.0	97	70-130			
1,2,4-Trimethylbenzene	21.3		µg/l		20.0	106	70-130			
1,3,5-Trimethylbenzene	21.7		µg/l		20.0	109	70-130			
Vinyl chloride	19.3		µg/l		20.0	96	70-130			
m,p-Xylene	47.4		µg/l		40.0	119	70-130			
o-Xylene	22.4		µg/l		20.0	112	70-130			
Tetrahydrofuran	20.1		µg/l		20.0	101	70-130			
Ethyl ether	19.0		µg/l		20.0	95	70-130			
Tert-amyl methyl ether	20.3		µg/l		20.0	101	70-130			
Ethyl tert-butyl ether	20.7		µg/l		20.0	103	70-130			
Di-isopropyl ether	20.0		µg/l		20.0	100	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330978 - SW846 5030 Water MS										
<u>LCS (1330978-BS1)</u>										
Tert-Butanol / butyl alcohol	178		µg/l		200	89	70-130			
1,4-Dioxane	213		µg/l		200	107	70-130			
trans-1,4-Dichloro-2-butene	19.0		µg/l		20.0	95	70-130			
Ethanol	391		µg/l		400	98	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	50.8		µg/l		50.0	102	70-130			
<u>Surrogate: Toluene-d8</u>										
	49.1		µg/l		50.0	98	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	48.0		µg/l		50.0	96	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	45.5		µg/l		50.0	91	70-130			
<u>LCS Dup (1330978-BSD1)</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.1		µg/l		20.0	100	70-130	5	20	
Acetone	20.4		µg/l		20.0	102	70-130	2	20	
Acrylonitrile	17.5		µg/l		20.0	87	70-130	5	20	
Benzene	20.6		µg/l		20.0	103	70-130	3	20	
Bromobenzene	18.4		µg/l		20.0	92	70-130	6	20	
Bromochloromethane	17.3		µg/l		20.0	86	70-130	4	20	
Bromodichloromethane	14.4		µg/l		20.0	72	70-130	4	20	
Bromoform	11.5	QC2	µg/l		20.0	58	70-130	9	20	
Bromomethane	22.7		µg/l		20.0	113	70-130	1	20	
2-Butanone (MEK)	22.5		µg/l		20.0	112	70-130	3	20	
n-Butylbenzene	21.0		µg/l		20.0	105	70-130	3	20	
sec-Butylbenzene	20.4		µg/l		20.0	102	70-130	5	20	
tert-Butylbenzene	20.1		µg/l		20.0	100	70-130	6	20	
Carbon disulfide	14.3		µg/l		20.0	72	70-130	5	20	
Carbon tetrachloride	14.6		µg/l		20.0	73	70-130	3	20	
Chlorobenzene	19.1		µg/l		20.0	95	70-130	3	20	
Chloroethane	19.5		µg/l		20.0	97	70-130	1	20	
Chloroform	18.1		µg/l		20.0	90	70-130	3	20	
Chloromethane	17.6		µg/l		20.0	88	70-130	6	20	
2-Chlorotoluene	21.4		µg/l		20.0	107	70-130	4	20	
4-Chlorotoluene	21.0		µg/l		20.0	105	70-130	4	20	
1,2-Dibromo-3-chloropropane	12.4	QC2	µg/l		20.0	62	70-130	1	20	
Dibromochloromethane	13.4	QC2	µg/l		20.0	67	70-130	2	20	
1,2-Dibromoethane (EDB)	19.3		µg/l		20.0	97	70-130	1	20	
Dibromomethane	19.4		µg/l		20.0	97	70-130	0.5	20	
1,2-Dichlorobenzene	20.0		µg/l		20.0	100	70-130	0.2	20	
1,3-Dichlorobenzene	20.3		µg/l		20.0	101	70-130	4	20	
1,4-Dichlorobenzene	18.3		µg/l		20.0	91	70-130	1	20	
Dichlorodifluoromethane (Freon12)	16.7		µg/l		20.0	84	70-130	7	20	
1,1-Dichloroethane	18.5		µg/l		20.0	92	70-130	0.8	20	
1,2-Dichloroethane	18.4		µg/l		20.0	92	70-130	4	20	
1,1-Dichloroethene	16.8		µg/l		20.0	84	70-130	8	20	
cis-1,2-Dichloroethene	18.2		µg/l		20.0	91	70-130	5	20	
trans-1,2-Dichloroethene	17.0		µg/l		20.0	85	70-130	2	20	
1,2-Dichloropropane	18.8		µg/l		20.0	94	70-130	3	20	
1,3-Dichloropropane	18.9		µg/l		20.0	94	70-130	4	20	
2,2-Dichloropropane	14.1		µg/l		20.0	70	70-130	4	20	
1,1-Dichloropropene	20.3		µg/l		20.0	102	70-130	6	20	
cis-1,3-Dichloropropene	15.8		µg/l		20.0	79	70-130	0.3	20	
trans-1,3-Dichloropropene	15.6		µg/l		20.0	78	70-130	2	20	
Ethylbenzene	21.4		µg/l		20.0	107	70-130	7	20	
Hexachlorobutadiene	19.1		µg/l		20.0	96	70-130	3	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330978 - SW846 5030 Water MS										
<u>LCS Dup (1330978-BSD1)</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
2-Hexanone (MBK)	20.4		µg/l		20.0	102	70-130	1	20	
Isopropylbenzene	21.0		µg/l		20.0	105	70-130	6	20	
4-Isopropyltoluene	22.1		µg/l		20.0	110	70-130	5	20	
Methyl tert-butyl ether	19.6		µg/l		20.0	98	70-130	0.3	20	
4-Methyl-2-pentanone (MIBK)	22.0		µg/l		20.0	110	70-130	5	20	
Methylene chloride	19.7		µg/l		20.0	99	70-130	2	20	
Naphthalene	20.7		µg/l		20.0	103	70-130	2	20	
n-Propylbenzene	20.1		µg/l		20.0	101	70-130	6	20	
Styrene	20.2		µg/l		20.0	101	70-130	4	20	
1,1,1,2-Tetrachloroethane	15.4		µg/l		20.0	77	70-130	3	20	
1,1,2,2-Tetrachloroethane	21.1		µg/l		20.0	106	70-130	4	20	
Tetrachloroethene	20.2		µg/l		20.0	101	70-130	5	20	
Toluene	19.7		µg/l		20.0	98	70-130	5	20	
1,2,3-Trichlorobenzene	19.5		µg/l		20.0	98	70-130	6	20	
1,2,4-Trichlorobenzene	20.2		µg/l		20.0	101	70-130	5	20	
1,3,5-Trichlorobenzene	19.1		µg/l		20.0	96	70-130	6	20	
1,1,1-Trichloroethane	15.5		µg/l		20.0	78	70-130	6	20	
1,1,2-Trichloroethane	18.6		µg/l		20.0	93	70-130	5	20	
Trichloroethene	17.1		µg/l		20.0	85	70-130	4	20	
Trichlorofluoromethane (Freon 11)	18.1		µg/l		20.0	91	70-130	4	20	
1,2,3-Trichloropropane	18.8		µg/l		20.0	94	70-130	4	20	
1,2,4-Trimethylbenzene	20.5		µg/l		20.0	103	70-130	4	20	
1,3,5-Trimethylbenzene	20.3		µg/l		20.0	102	70-130	7	20	
Vinyl chloride	18.0		µg/l		20.0	90	70-130	7	20	
m,p-Xylene	45.4		µg/l		40.0	114	70-130	4	20	
o-Xylene	22.0		µg/l		20.0	110	70-130	2	20	
Tetrahydrofuran	18.8		µg/l		20.0	94	70-130	7	20	
Ethyl ether	18.9		µg/l		20.0	95	70-130	0.5	20	
Tert-amyl methyl ether	19.7		µg/l		20.0	98	70-130	3	20	
Ethyl tert-butyl ether	20.5		µg/l		20.0	102	70-130	1	20	
Di-isopropyl ether	19.7		µg/l		20.0	98	70-130	1	20	
Tert-Butanol / butyl alcohol	172		µg/l		200	86	70-130	4	20	
1,4-Dioxane	190		µg/l		200	95	70-130	11	20	
trans-1,4-Dichloro-2-butene	17.9		µg/l		20.0	89	70-130	6	20	
Ethanol	402		µg/l		400	101	70-130	3	20	
Surrogate: 4-Bromofluorobenzene	50.1		µg/l		50.0	100	70-130			
Surrogate: Toluene-d8	50.4		µg/l		50.0	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.4		µg/l		50.0	97	70-130			
Surrogate: Dibromofluoromethane	45.2		µg/l		50.0	90	70-130			
<u>Matrix Spike (1330978-MS1)</u>										
<u>Source: SB82287-03</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2	D	µg/l		20.0	BRL	106	70-130		
Acetone	22.4	D	µg/l		20.0	BRL	112	70-130		
Acrylonitrile	18.0	D	µg/l		20.0	BRL	90	70-130		
Benzene	21.1	D	µg/l		20.0	BRL	105	70-130		
Bromobenzene	19.1	D	µg/l		20.0	BRL	96	70-130		
Bromochloromethane	16.6	D	µg/l		20.0	BRL	83	70-130		
Bromodichloromethane	14.4	D	µg/l		20.0	BRL	72	70-130		
Bromoform	12.2	QC2, D	µg/l		20.0	BRL	61	70-130		
Bromomethane	22.6	D	µg/l		20.0	BRL	113	70-130		
2-Butanone (MEK)	22.4	D	µg/l		20.0	BRL	112	70-130		
n-Butylbenzene	22.7	D	µg/l		20.0	BRL	114	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330978 - SW846 5030 Water MS													
<u>Matrix Spike (1330978-MS1)</u>													
					<u>Source: SB82287-03</u>	Prepared & Analyzed: 26-Dec-13							
sec-Butylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130					
tert-Butylbenzene	20.7	D	µg/l		20.0	BRL	103	70-130					
Carbon disulfide	14.8	D	µg/l		20.0	BRL	74	70-130					
Carbon tetrachloride	15.4	D	µg/l		20.0	BRL	77	70-130					
Chlorobenzene	19.2	D	µg/l		20.0	BRL	96	70-130					
Chloroethane	20.0	D	µg/l		20.0	BRL	100	70-130					
Chloroform	18.5	D	µg/l		20.0	BRL	92	70-130					
Chloromethane	17.8	D	µg/l		20.0	BRL	89	70-130					
2-Chlorotoluene	21.6	D	µg/l		20.0	BRL	108	70-130					
4-Chlorotoluene	21.9	D	µg/l		20.0	BRL	110	70-130					
1,2-Dibromo-3-chloropropane	12.8	QC2, D	µg/l		20.0	BRL	64	70-130					
Dibromochloromethane	13.0	QC2, D	µg/l		20.0	BRL	65	70-130					
1,2-Dibromoethane (EDB)	19.2	D	µg/l		20.0	BRL	96	70-130					
Dibromomethane	19.1	D	µg/l		20.0	BRL	95	70-130					
1,2-Dichlorobenzene	20.4	D	µg/l		20.0	BRL	102	70-130					
1,3-Dichlorobenzene	21.0	D	µg/l		20.0	BRL	105	70-130					
1,4-Dichlorobenzene	18.7	D	µg/l		20.0	BRL	93	70-130					
Dichlorodifluoromethane (Freon12)	15.3	D	µg/l		20.0	BRL	76	70-130					
1,1-Dichloroethane	18.4	D	µg/l		20.0	BRL	92	70-130					
1,2-Dichloroethane	17.9	D	µg/l		20.0	BRL	89	70-130					
1,1-Dichloroethene	18.2	D	µg/l		20.0	BRL	91	70-130					
cis-1,2-Dichloroethene	19.1	D	µg/l		20.0	BRL	95	70-130					
trans-1,2-Dichloroethene	17.6	D	µg/l		20.0	BRL	88	70-130					
1,2-Dichloropropane	19.5	D	µg/l		20.0	BRL	98	70-130					
1,3-Dichloropropane	19.2	D	µg/l		20.0	BRL	96	70-130					
2,2-Dichloropropane	14.8	D	µg/l		20.0	BRL	74	70-130					
1,1-Dichloropropene	22.1	D	µg/l		20.0	BRL	111	70-130					
cis-1,3-Dichloropropene	15.8	D	µg/l		20.0	BRL	79	70-130					
trans-1,3-Dichloropropene	15.3	D	µg/l		20.0	BRL	76	70-130					
Ethylbenzene	22.8	D	µg/l		20.0	BRL	114	70-130					
Hexachlorobutadiene	21.1	D	µg/l		20.0	BRL	105	70-130					
2-Hexanone (MBK)	20.6	D	µg/l		20.0	BRL	103	70-130					
Isopropylbenzene	22.4	D	µg/l		20.0	BRL	112	70-130					
4-Isopropyltoluene	24.0	D	µg/l		20.0	BRL	120	70-130					
Methyl tert-butyl ether	19.0	D	µg/l		20.0	BRL	95	70-130					
4-Methyl-2-pentanone (MIBK)	21.4	D	µg/l		20.0	BRL	107	70-130					
Methylene chloride	19.6	D	µg/l		20.0	BRL	98	70-130					
Naphthalene	22.7	D	µg/l		20.0	BRL	113	70-130					
n-Propylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130					
Styrene	21.2	D	µg/l		20.0	BRL	106	70-130					
1,1,1,2-Tetrachloroethane	15.9	D	µg/l		20.0	BRL	79	70-130					
1,1,2,2-Tetrachloroethane	22.0	D	µg/l		20.0	BRL	110	70-130					
Tetrachloroethene	20.3	D	µg/l		20.0	BRL	101	70-130					
Toluene	20.0	D	µg/l		20.0	BRL	100	70-130					
1,2,3-Trichlorobenzene	22.6	D	µg/l		20.0	BRL	113	70-130					
1,2,4-Trichlorobenzene	23.4	D	µg/l		20.0	BRL	117	70-130					
1,3,5-Trichlorobenzene	21.6	D	µg/l		20.0	BRL	108	70-130					
1,1,1-Trichloroethane	16.3	D	µg/l		20.0	BRL	81	70-130					
1,1,2-Trichloroethane	19.0	D	µg/l		20.0	BRL	95	70-130					
Trichloroethene	17.8	D	µg/l		20.0	BRL	89	70-130					
Trichlorofluoromethane (Freon 11)	18.2	D	µg/l		20.0	BRL	91	70-130					
1,2,3-Trichloropropane	18.8	D	µg/l		20.0	BRL	94	70-130					

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330978 - SW846 5030 Water MS													
Matrix Spike (1330978-MS1)													
					Source: SB82287-03	Prepared & Analyzed: 26-Dec-13							
1,2,4-Trimethylbenzene	21.7	D	µg/l		20.0	BRL	108	70-130					
1,3,5-Trimethylbenzene	21.7	D	µg/l		20.0	BRL	108	70-130					
Vinyl chloride	19.7	D	µg/l		20.0	BRL	98	70-130					
m,p-Xylene	46.8	D	µg/l		40.0	BRL	117	70-130					
o-Xylene	22.6	D	µg/l		20.0	BRL	113	70-130					
Tetrahydrofuran	20.8	D	µg/l		20.0	BRL	104	70-130					
Ethyl ether	18.0	D	µg/l		20.0	BRL	90	70-130					
Tert-amyl methyl ether	19.3	D	µg/l		20.0	BRL	97	70-130					
Ethyl tert-butyl ether	20.7	D	µg/l		20.0	BRL	103	70-130					
Di-isopropyl ether	20.0	D	µg/l		20.0	BRL	100	70-130					
Tert-Butanol / butyl alcohol	180	D	µg/l		200	BRL	90	70-130					
1,4-Dioxane	224	D	µg/l		200	BRL	112	70-130					
trans-1,4-Dichloro-2-butene	19.3	D	µg/l		20.0	BRL	96	70-130					
Ethanol	378	D	µg/l		400	BRL	94	70-130					
Surrogate: 4-Bromofluorobenzene	50.1		µg/l		50.0		100	70-130					
Surrogate: Toluene-d8	50.0		µg/l		50.0		100	70-130					
Surrogate: 1,2-Dichloroethane-d4	46.8		µg/l		50.0		94	70-130					
Surrogate: Dibromofluoromethane	45.7		µg/l		50.0		91	70-130					
Matrix Spike Dup (1330978-MSD1)													
					Source: SB82287-03	Prepared & Analyzed: 26-Dec-13							
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.8	D	µg/l		20.0	BRL	99	70-130	7	20			
Acetone	21.0	D	µg/l		20.0	BRL	105	70-130	6	20			
Acrylonitrile	18.0	D	µg/l		20.0	BRL	90	70-130	0.6	20			
Benzene	20.2	D	µg/l		20.0	BRL	101	70-130	4	20			
Bromobenzene	18.7	D	µg/l		20.0	BRL	94	70-130	2	20			
Bromoform	15.7	D	µg/l		20.0	BRL	79	70-130	6	20			
Bromochloromethane	14.1	D	µg/l		20.0	BRL	70	70-130	2	20			
Bromodichloromethane	11.9	QC2, D	µg/l		20.0	BRL	60	70-130	2	20			
Bromoform	22.9	D	µg/l		20.0	BRL	114	70-130	1	20			
2-Butanone (MEK)	21.8	D	µg/l		20.0	BRL	109	70-130	3	20			
n-Butylbenzene	22.0	D	µg/l		20.0	BRL	110	70-130	3	20			
sec-Butylbenzene	21.0	D	µg/l		20.0	BRL	105	70-130	2	20			
tert-Butylbenzene	20.6	D	µg/l		20.0	BRL	103	70-130	0.5	20			
Carbon disulfide	13.9	D	µg/l		20.0	BRL	70	70-130	6	20			
Carbon tetrachloride	14.1	D	µg/l		20.0	BRL	71	70-130	9	20			
Chlorobenzene	19.0	D	µg/l		20.0	BRL	95	70-130	1	20			
Chloroethane	19.5	D	µg/l		20.0	BRL	98	70-130	2	20			
Chloroform	17.7	D	µg/l		20.0	BRL	88	70-130	4	20			
Chloromethane	16.4	D	µg/l		20.0	BRL	82	70-130	8	20			
2-Chlorotoluene	21.4	D	µg/l		20.0	BRL	107	70-130	1	20			
4-Chlorotoluene	21.4	D	µg/l		20.0	BRL	107	70-130	2	20			
1,2-Dibromo-3-chloropropane	12.0	QC2, D	µg/l		20.0	BRL	60	70-130	6	20			
Dibromochloromethane	13.0	QC2, D	µg/l		20.0	BRL	65	70-130	0	20			
1,2-Dibromoethane (EDB)	18.9	D	µg/l		20.0	BRL	94	70-130	2	20			
Dibromomethane	19.0	D	µg/l		20.0	BRL	95	70-130	0.5	20			
1,2-Dichlorobenzene	20.2	D	µg/l		20.0	BRL	101	70-130	0.9	20			
1,3-Dichlorobenzene	20.7	D	µg/l		20.0	BRL	103	70-130	2	20			
1,4-Dichlorobenzene	18.2	D	µg/l		20.0	BRL	91	70-130	2	20			
Dichlorodifluoromethane (Freon12)	14.9	D	µg/l		20.0	BRL	75	70-130	3	20			
1,1-Dichloroethane	17.9	D	µg/l		20.0	BRL	90	70-130	3	20			
1,2-Dichloroethane	17.8	D	µg/l		20.0	BRL	89	70-130	0.6	20			
1,1-Dichloroethene	17.3	D	µg/l		20.0	BRL	86	70-130	5	20			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330978 - SW846 5030 Water MS													
<u>Matrix Spike Dup (1330978-MSD1)</u>													
					<u>Source: SB82287-03</u>	Prepared & Analyzed: 26-Dec-13							
cis-1,2-Dichloroethene	18.4	D	µg/l		20.0	BRL	92	70-130	4	20			
trans-1,2-Dichloroethene	16.8	D	µg/l		20.0	BRL	84	70-130	5	20			
1,2-Dichloropropane	19.0	D	µg/l		20.0	BRL	95	70-130	3	20			
1,3-Dichloropropane	18.2	D	µg/l		20.0	BRL	91	70-130	5	20			
2,2-Dichloropropane	14.4	D	µg/l		20.0	BRL	72	70-130	3	20			
1,1-Dichloropropene	20.7	D	µg/l		20.0	BRL	103	70-130	7	20			
cis-1,3-Dichloropropene	15.4	D	µg/l		20.0	BRL	77	70-130	3	20			
trans-1,3-Dichloropropene	15.7	D	µg/l		20.0	BRL	78	70-130	2	20			
Ethylbenzene	22.0	D	µg/l		20.0	BRL	110	70-130	4	20			
Hexachlorobutadiene	20.3	D	µg/l		20.0	BRL	101	70-130	4	20			
2-Hexanone (MBK)	20.6	D	µg/l		20.0	BRL	103	70-130	0	20			
Isopropylbenzene	21.4	D	µg/l		20.0	BRL	107	70-130	4	20			
4-Isopropyltoluene	23.1	D	µg/l		20.0	BRL	115	70-130	4	20			
Methyl tert-butyl ether	19.2	D	µg/l		20.0	BRL	96	70-130	1	20			
4-Methyl-2-pentanone (MIBK)	21.5	D	µg/l		20.0	BRL	108	70-130	0.7	20			
Methylene chloride	18.6	D	µg/l		20.0	BRL	93	70-130	5	20			
Naphthalene	22.0	D	µg/l		20.0	BRL	110	70-130	3	20			
n-Propylbenzene	21.0	D	µg/l		20.0	BRL	105	70-130	1	20			
Styrene	20.4	D	µg/l		20.0	BRL	102	70-130	4	20			
1,1,1,2-Tetrachloroethane	15.2	D	µg/l		20.0	BRL	76	70-130	4	20			
1,1,2,2-Tetrachloroethane	21.3	D	µg/l		20.0	BRL	107	70-130	3	20			
Tetrachloroethene	19.5	D	µg/l		20.0	BRL	98	70-130	4	20			
Toluene	19.4	D	µg/l		20.0	BRL	97	70-130	3	20			
1,2,3-Trichlorobenzene	21.6	D	µg/l		20.0	BRL	108	70-130	4	20			
1,2,4-Trichlorobenzene	23.4	D	µg/l		20.0	BRL	117	70-130	0.3	20			
1,3,5-Trichlorobenzene	20.9	D	µg/l		20.0	BRL	105	70-130	3	20			
1,1,1-Trichloroethane	15.4	D	µg/l		20.0	BRL	77	70-130	5	20			
1,1,2-Trichloroethane	18.4	D	µg/l		20.0	BRL	92	70-130	3	20			
Trichloroethene	16.8	D	µg/l		20.0	BRL	84	70-130	5	20			
Trichlorofluoromethane (Freon 11)	17.8	D	µg/l		20.0	BRL	89	70-130	2	20			
1,2,3-Trichloropropane	19.1	D	µg/l		20.0	BRL	95	70-130	2	20			
1,2,4-Trimethylbenzene	21.2	D	µg/l		20.0	BRL	106	70-130	2	20			
1,3,5-Trimethylbenzene	21.1	D	µg/l		20.0	BRL	105	70-130	3	20			
Vinyl chloride	18.5	D	µg/l		20.0	BRL	92	70-130	6	20			
m,p-Xylene	46.0	D	µg/l		40.0	BRL	115	70-130	2	20			
o-Xylene	21.6	D	µg/l		20.0	BRL	108	70-130	5	20			
Tetrahydrofuran	20.2	D	µg/l		20.0	BRL	101	70-130	3	20			
Ethyl ether	18.1	D	µg/l		20.0	BRL	90	70-130	0.8	20			
Tert-amyl methyl ether	19.3	D	µg/l		20.0	BRL	96	70-130	0.2	20			
Ethyl tert-butyl ether	20.7	D	µg/l		20.0	BRL	104	70-130	0.3	20			
Di-isopropyl ether	19.5	D	µg/l		20.0	BRL	97	70-130	2	20			
Tert-Butanol / butyl alcohol	173	D	µg/l		200	BRL	87	70-130	4	20			
1,4-Dioxane	197	D	µg/l		200	BRL	99	70-130	13	20			
trans-1,4-Dichloro-2-butene	19.1	D	µg/l		20.0	BRL	95	70-130	1	20			
Ethanol	374	D	µg/l		400	BRL	93	70-130	1	20			
Surrogate: 4-Bromofluorobenzene	50.7		µg/l		50.0		101	70-130					
Surrogate: Toluene-d8	49.7		µg/l		50.0		99	70-130					
Surrogate: 1,2-Dichloroethane-d4	45.8		µg/l		50.0		92	70-130					
Surrogate: Dibromofluoromethane	44.6		µg/l		50.0		89	70-130					

Batch 1331099 - SW846 5030 Water MS

Blank (1331099-BLK1)

Prepared & Analyzed: 27-Dec-13

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>Blank (1331099-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>Blank (1331099-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	29.2		µg/l	30.0		97		70-130		
Surrogate: Toluene-d8	30.8		µg/l	30.0		103		70-130		
Surrogate: 1,2-Dichloroethane-d4	32.2		µg/l	30.0		107		70-130		
Surrogate: Dibromofluoromethane	29.0		µg/l	30.0		97		70-130		
<u>LCS (1331099-BS1)</u>										
Prepared & Analyzed: 27-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.7		µg/l	20.0		113		70-130		
Acetone	21.9		µg/l	20.0		110		70-130		
Acrylonitrile	19.4		µg/l	20.0		97		70-130		
Benzene	21.6		µg/l	20.0		108		70-130		
Bromobenzene	21.8		µg/l	20.0		109		70-130		
Bromoform	21.6		µg/l	20.0		108		70-130		
Bromodichloromethane	23.0		µg/l	20.0		115		70-130		
Bromoform	23.6		µg/l	20.0		118		70-130		
Bromomethane	23.8		µg/l	20.0		119		70-130		
2-Butanone (MEK)	20.6		µg/l	20.0		103		70-130		
n-Butylbenzene	20.2		µg/l	20.0		101		70-130		
sec-Butylbenzene	21.1		µg/l	20.0		106		70-130		
tert-Butylbenzene	21.2		µg/l	20.0		106		70-130		
Carbon disulfide	22.5		µg/l	20.0		112		70-130		
Carbon tetrachloride	24.0		µg/l	20.0		120		70-130		
Chlorobenzene	20.6		µg/l	20.0		103		70-130		
Chloroethane	21.2		µg/l	20.0		106		70-130		
Chloroform	20.4		µg/l	20.0		102		70-130		
Chloromethane	21.0		µg/l	20.0		105		70-130		
2-Chlorotoluene	23.3		µg/l	20.0		116		70-130		
4-Chlorotoluene	22.5		µg/l	20.0		112		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>LCS (1331099-BS1)</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
1,2-Dibromo-3-chloropropane	23.3		µg/l		20.0	116	70-130			
Dibromochloromethane	22.8		µg/l		20.0	114	70-130			
1,2-Dibromoethane (EDB)	21.4		µg/l		20.0	107	70-130			
Dibromomethane	21.5		µg/l		20.0	108	70-130			
1,2-Dichlorobenzene	21.1		µg/l		20.0	106	70-130			
1,3-Dichlorobenzene	21.0		µg/l		20.0	105	70-130			
1,4-Dichlorobenzene	19.7		µg/l		20.0	99	70-130			
Dichlorodifluoromethane (Freon12)	20.4		µg/l		20.0	102	70-130			
1,1-Dichloroethane	21.5		µg/l		20.0	108	70-130			
1,2-Dichloroethane	20.6		µg/l		20.0	103	70-130			
1,1-Dichloroethene	22.2		µg/l		20.0	111	70-130			
cis-1,2-Dichloroethene	21.2		µg/l		20.0	106	70-130			
trans-1,2-Dichloroethene	21.3		µg/l		20.0	106	70-130			
1,2-Dichloropropane	20.6		µg/l		20.0	103	70-130			
1,3-Dichloropropane	21.3		µg/l		20.0	106	70-130			
2,2-Dichloropropane	27.2	QC2	µg/l		20.0	136	70-130			
1,1-Dichloropropene	21.2		µg/l		20.0	106	70-130			
cis-1,3-Dichloropropene	22.8		µg/l		20.0	114	70-130			
trans-1,3-Dichloropropene	24.3		µg/l		20.0	122	70-130			
Ethylbenzene	22.0		µg/l		20.0	110	70-130			
Hexachlorobutadiene	21.6		µg/l		20.0	108	70-130			
2-Hexanone (MBK)	23.1		µg/l		20.0	116	70-130			
Isopropylbenzene	21.7		µg/l		20.0	109	70-130			
4-Isopropyltoluene	21.9		µg/l		20.0	109	70-130			
Methyl tert-butyl ether	25.0		µg/l		20.0	125	70-130			
4-Methyl-2-pentanone (MIBK)	18.2		µg/l		20.0	91	70-130			
Methylene chloride	22.2		µg/l		20.0	111	70-130			
Naphthalene	20.0		µg/l		20.0	100	70-130			
n-Propylbenzene	20.7		µg/l		20.0	104	70-130			
Styrene	23.6		µg/l		20.0	118	70-130			
1,1,1,2-Tetrachloroethane	23.5		µg/l		20.0	117	70-130			
1,1,2,2-Tetrachloroethane	21.0		µg/l		20.0	105	70-130			
Tetrachloroethene	21.7		µg/l		20.0	109	70-130			
Toluene	20.9		µg/l		20.0	105	70-130			
1,2,3-Trichlorobenzene	21.4		µg/l		20.0	107	70-130			
1,2,4-Trichlorobenzene	20.6		µg/l		20.0	103	70-130			
1,3,5-Trichlorobenzene	20.1		µg/l		20.0	101	70-130			
1,1,1-Trichloroethane	24.1		µg/l		20.0	120	70-130			
1,1,2-Trichloroethane	20.6		µg/l		20.0	103	70-130			
Trichloroethene	21.6		µg/l		20.0	108	70-130			
Trichlorofluoromethane (Freon 11)	21.8		µg/l		20.0	109	70-130			
1,2,3-Trichloropropane	20.9		µg/l		20.0	104	70-130			
1,2,4-Trimethylbenzene	20.6		µg/l		20.0	103	70-130			
1,3,5-Trimethylbenzene	20.8		µg/l		20.0	104	70-130			
Vinyl chloride	21.9		µg/l		20.0	110	70-130			
m,p-Xylene	44.0		µg/l		40.0	110	70-130			
o-Xylene	22.0		µg/l		20.0	110	70-130			
Tetrahydrofuran	19.1		µg/l		20.0	95	70-130			
Ethyl ether	21.5		µg/l		20.0	108	70-130			
Tert-amyl methyl ether	25.0		µg/l		20.0	125	70-130			
Ethyl tert-butyl ether	26.9	QC2	µg/l		20.0	134	70-130			
Di-isopropyl ether	21.1		µg/l		20.0	105	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>LCS (1331099-BS1)</u>										
						<u>Prepared & Analyzed: 27-Dec-13</u>				
Tert-Butanol / butyl alcohol	268	QM9	µg/l		200	134	70-130			
1,4-Dioxane	181		µg/l		200	90	70-130			
trans-1,4-Dichloro-2-butene	19.5		µg/l		20.0	97	70-130			
Ethanol	459		µg/l		400	115	70-130			
Surrogate: 4-Bromofluorobenzene	31.4		µg/l		30.0	105	70-130			
Surrogate: Toluene-d8	30.0		µg/l		30.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	30.3		µg/l		30.0	101	70-130			
Surrogate: Dibromofluoromethane	31.6		µg/l		30.0	105	70-130			
<u>LCS Dup (1331099-BSD1)</u>										
						<u>Prepared & Analyzed: 27-Dec-13</u>				
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.8		µg/l		20.0	114	70-130	0.4	20	
Acetone	23.4		µg/l		20.0	117	70-130	7	20	
Acrylonitrile	17.7		µg/l		20.0	88	70-130	9	20	
Benzene	21.6		µg/l		20.0	108	70-130	0.09	20	
Bromobenzene	22.0		µg/l		20.0	110	70-130	0.5	20	
Bromochloromethane	22.2		µg/l		20.0	111	70-130	3	20	
Bromodichloromethane	23.1		µg/l		20.0	115	70-130	0.3	20	
Bromoform	23.5		µg/l		20.0	118	70-130	0.3	20	
Bromomethane	23.6		µg/l		20.0	118	70-130	0.9	20	
2-Butanone (MEK)	18.1		µg/l		20.0	90	70-130	13	20	
n-Butylbenzene	20.8		µg/l		20.0	104	70-130	3	20	
sec-Butylbenzene	21.4		µg/l		20.0	107	70-130	2	20	
tert-Butylbenzene	22.2		µg/l		20.0	111	70-130	5	20	
Carbon disulfide	22.5		µg/l		20.0	112	70-130	0.04	20	
Carbon tetrachloride	23.9		µg/l		20.0	119	70-130	0.5	20	
Chlorobenzene	21.2		µg/l		20.0	106	70-130	3	20	
Chloroethane	20.6		µg/l		20.0	103	70-130	2	20	
Chloroform	20.1		µg/l		20.0	100	70-130	2	20	
Chloromethane	21.1		µg/l		20.0	105	70-130	0.1	20	
2-Chlorotoluene	24.2		µg/l		20.0	121	70-130	4	20	
4-Chlorotoluene	22.9		µg/l		20.0	115	70-130	2	20	
1,2-Dibromo-3-chloropropane	23.5		µg/l		20.0	118	70-130	1	20	
Dibromochloromethane	22.9		µg/l		20.0	114	70-130	0.3	20	
1,2-Dibromoethane (EDB)	21.3		µg/l		20.0	107	70-130	0.6	20	
Dibromomethane	22.2		µg/l		20.0	111	70-130	3	20	
1,2-Dichlorobenzene	21.9		µg/l		20.0	109	70-130	3	20	
1,3-Dichlorobenzene	21.5		µg/l		20.0	107	70-130	2	20	
1,4-Dichlorobenzene	20.3		µg/l		20.0	102	70-130	3	20	
Dichlorodifluoromethane (Freon12)	20.4		µg/l		20.0	102	70-130	0.1	20	
1,1-Dichloroethane	21.8		µg/l		20.0	109	70-130	2	20	
1,2-Dichloroethane	20.7		µg/l		20.0	103	70-130	0.3	20	
1,1-Dichloroethene	21.8		µg/l		20.0	109	70-130	2	20	
cis-1,2-Dichloroethene	21.5		µg/l		20.0	108	70-130	2	20	
trans-1,2-Dichloroethene	21.9		µg/l		20.0	109	70-130	3	20	
1,2-Dichloropropane	21.4		µg/l		20.0	107	70-130	4	20	
1,3-Dichloropropane	21.3		µg/l		20.0	107	70-130	0.2	20	
2,2-Dichloropropane	27.1	QC2	µg/l		20.0	136	70-130	0.1	20	
1,1-Dichloropropene	21.8		µg/l		20.0	109	70-130	3	20	
cis-1,3-Dichloropropene	23.2		µg/l		20.0	116	70-130	2	20	
trans-1,3-Dichloropropene	24.4		µg/l		20.0	122	70-130	0.2	20	
Ethylbenzene	23.1		µg/l		20.0	115	70-130	5	20	
Hexachlorobutadiene	20.9		µg/l		20.0	104	70-130	3	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>LCS Dup (1331099-BSD1)</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
2-Hexanone (MBK)	20.2		µg/l		20.0	101	70-130	13	20	
Isopropylbenzene	22.9		µg/l		20.0	114	70-130	5	20	
4-Isopropyltoluene	22.1		µg/l		20.0	110	70-130	1	20	
Methyl tert-butyl ether	25.0		µg/l		20.0	125	70-130	0.04	20	
4-Methyl-2-pentanone (MIBK)	19.8		µg/l		20.0	99	70-130	8	20	
Methylene chloride	21.7		µg/l		20.0	108	70-130	2	20	
Naphthalene	19.7		µg/l		20.0	98	70-130	2	20	
n-Propylbenzene	20.9		µg/l		20.0	105	70-130	0.9	20	
Styrene	24.0		µg/l		20.0	120	70-130	2	20	
1,1,1,2-Tetrachloroethane	23.8		µg/l		20.0	119	70-130	1	20	
1,1,2,2-Tetrachloroethane	21.8		µg/l		20.0	109	70-130	4	20	
Tetrachloroethene	21.7		µg/l		20.0	109	70-130	0	20	
Toluene	22.0		µg/l		20.0	110	70-130	5	20	
1,2,3-Trichlorobenzene	21.3		µg/l		20.0	107	70-130	0.09	20	
1,2,4-Trichlorobenzene	20.4		µg/l		20.0	102	70-130	1	20	
1,3,5-Trichlorobenzene	20.4		µg/l		20.0	102	70-130	1	20	
1,1,1-Trichloroethane	24.1		µg/l		20.0	121	70-130	0.2	20	
1,1,2-Trichloroethane	20.6		µg/l		20.0	103	70-130	0.1	20	
Trichloroethene	20.9		µg/l		20.0	104	70-130	3	20	
Trichlorofluoromethane (Freon 11)	21.6		µg/l		20.0	108	70-130	1	20	
1,2,3-Trichloropropane	21.3		µg/l		20.0	106	70-130	2	20	
1,2,4-Trimethylbenzene	21.2		µg/l		20.0	106	70-130	3	20	
1,3,5-Trimethylbenzene	21.5		µg/l		20.0	108	70-130	3	20	
Vinyl chloride	22.4		µg/l		20.0	112	70-130	2	20	
m,p-Xylene	47.0		µg/l		40.0	118	70-130	7	20	
o-Xylene	23.3		µg/l		20.0	116	70-130	6	20	
Tetrahydrofuran	22.7		µg/l		20.0	114	70-130	17	20	
Ethyl ether	21.2		µg/l		20.0	106	70-130	2	20	
Tert-amyl methyl ether	24.5		µg/l		20.0	123	70-130	2	20	
Ethyl tert-butyl ether	26.7	QC2	µg/l		20.0	134	70-130	0.6	20	
Di-isopropyl ether	21.3		µg/l		20.0	106	70-130	0.9	20	
Tert-Butanol / butyl alcohol	237		µg/l		200	119	70-130	12	20	
1,4-Dioxane	193		µg/l		200	97	70-130	7	20	
trans-1,4-Dichloro-2-butene	19.6		µg/l		20.0	98	70-130	0.7	20	
Ethanol	427		µg/l		400	107	70-130	7	20	
Surrogate: 4-Bromofluorobenzene	30.8		µg/l		30.0	103	70-130			
Surrogate: Toluene-d8	29.8		µg/l		30.0	99	70-130			
Surrogate: 1,2-Dichloroethane-d4	29.6		µg/l		30.0	99	70-130			
Surrogate: Dibromofluoromethane	31.2		µg/l		30.0	104	70-130			
<u>Matrix Spike (1331099-MS1)</u>										
<u>Source: SB82287-03RE1</u> <u>Prepared & Analyzed: 27-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	16.0		µg/l		20.0	BRL	80	70-130		
Acetone	18.3		µg/l		20.0	BRL	92	70-130		
Acrylonitrile	17.0		µg/l		20.0	BRL	85	70-130		
Benzene	13.8	QM7	µg/l		20.0	BRL	69	70-130		
Bromobenzene	20.7		µg/l		20.0	BRL	104	70-130		
Bromoform	23.5		µg/l		20.0	BRL	118	70-130		
Bromochloromethane	16.6		µg/l		20.0	BRL	83	70-130		
Bromodichloromethane	23.1		µg/l		20.0	BRL	116	70-130		
Bromomethane	8.13	QM7	µg/l		20.0	BRL	41	70-130		
2-Butanone (MEK)	16.4		µg/l		20.0	BRL	82	70-130		
n-Butylbenzene	21.6		µg/l		20.0	BRL	108	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>Matrix Spike (1331099-MS1)</u>										
<u>Source: SB82287-03RE1</u> Prepared & Analyzed: 27-Dec-13										
sec-Butylbenzene	22.0		µg/l		20.0	BRL	110	70-130		
tert-Butylbenzene	21.6		µg/l		20.0	BRL	108	70-130		
Carbon disulfide	2.15	QM7	µg/l		20.0	BRL	11	70-130		
Carbon tetrachloride	17.7		µg/l		20.0	BRL	89	70-130		
Chlorobenzene	19.0		µg/l		20.0	BRL	95	70-130		
Chloroethane	8.64	QM7	µg/l		20.0	BRL	43	70-130		
Chloroform	19.1		µg/l		20.0	BRL	96	70-130		
Chloromethane	5.67	QM7	µg/l		20.0	BRL	28	70-130		
2-Chlorotoluene	23.7		µg/l		20.0	BRL	118	70-130		
4-Chlorotoluene	22.7		µg/l		20.0	BRL	114	70-130		
1,2-Dibromo-3-chloropropane	22.7		µg/l		20.0	BRL	113	70-130		
Dibromochloromethane	23.0		µg/l		20.0	BRL	115	70-130		
1,2-Dibromoethane (EDB)	18.8		µg/l		20.0	BRL	94	70-130		
Dibromomethane	18.0		µg/l		20.0	BRL	90	70-130		
1,2-Dichlorobenzene	21.4		µg/l		20.0	BRL	107	70-130		
1,3-Dichlorobenzene	22.4		µg/l		20.0	BRL	112	70-130		
1,4-Dichlorobenzene	20.2		µg/l		20.0	BRL	101	70-130		
Dichlorodifluoromethane (Freon12)	8.23	QM7	µg/l		20.0	BRL	41	70-130		
1,1-Dichloroethane	17.5		µg/l		20.0	BRL	87	70-130		
1,2-Dichloroethane	17.7		µg/l		20.0	BRL	89	70-130		
1,1-Dichloroethene	10.6	QM7	µg/l		20.0	BRL	53	70-130		
cis-1,2-Dichloroethene	16.7		µg/l		20.0	BRL	84	70-130		
trans-1,2-Dichloroethene	10.8	QM7	µg/l		20.0	BRL	54	70-130		
1,2-Dichloropropane	17.8		µg/l		20.0	BRL	89	70-130		
1,3-Dichloropropane	20.0		µg/l		20.0	BRL	100	70-130		
2,2-Dichloropropane	22.2		µg/l		20.0	BRL	111	70-130		
1,1-Dichloropropene	12.0	QM7	µg/l		20.0	BRL	60	70-130		
cis-1,3-Dichloropropene	18.5		µg/l		20.0	BRL	92	70-130		
trans-1,3-Dichloropropene	21.1		µg/l		20.0	BRL	105	70-130		
Ethylbenzene	19.0		µg/l		20.0	BRL	95	70-130		
Hexachlorobutadiene	23.7		µg/l		20.0	BRL	118	70-130		
2-Hexanone (MBK)	18.0		µg/l		20.0	BRL	90	70-130		
Isopropylbenzene	21.0		µg/l		20.0	BRL	105	70-130		
4-Isopropyltoluene	21.7		µg/l		20.0	BRL	109	70-130		
Methyl tert-butyl ether	20.6		µg/l		20.0	BRL	103	70-130		
4-Methyl-2-pentanone (MIBK)	18.6		µg/l		20.0	BRL	93	70-130		
Methylene chloride	13.6	QM7	µg/l		20.0	BRL	68	70-130		
Naphthalene	19.0		µg/l		20.0	BRL	95	70-130		
n-Propylbenzene	20.3		µg/l		20.0	BRL	101	70-130		
Styrene	21.7		µg/l		20.0	BRL	108	70-130		
1,1,1,2-Tetrachloroethane	23.2		µg/l		20.0	BRL	116	70-130		
1,1,2,2-Tetrachloroethane	27.4	QM7	µg/l		20.0	BRL	137	70-130		
Tetrachloroethene	14.5		µg/l		20.0	BRL	73	70-130		
Toluene	16.0		µg/l		20.0	BRL	80	70-130		
1,2,3-Trichlorobenzene	20.8		µg/l		20.0	BRL	104	70-130		
1,2,4-Trichlorobenzene	20.9		µg/l		20.0	BRL	104	70-130		
1,3,5-Trichlorobenzene	21.5		µg/l		20.0	BRL	107	70-130		
1,1,1-Trichloroethane	19.7		µg/l		20.0	BRL	99	70-130		
1,1,2-Trichloroethane	20.9		µg/l		20.0	BRL	104	70-130		
Trichloroethene	14.6		µg/l		20.0	BRL	73	70-130		
Trichlorofluoromethane (Freon 11)	12.2	QM7	µg/l		20.0	BRL	61	70-130		
1,2,3-Trichloropropane	21.4		µg/l		20.0	BRL	107	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>Matrix Spike (1331099-MS1)</u>										
Source: SB82287-03RE1 Prepared & Analyzed: 27-Dec-13										
1,2,4-Trimethylbenzene	20.8		µg/l		20.0	BRL	104	70-130		
1,3,5-Trimethylbenzene	20.8		µg/l		20.0	BRL	104	70-130		
Vinyl chloride	7.56	QM7	µg/l		20.0	BRL	38	70-130		
m,p-Xylene	38.6		µg/l		40.0	BRL	97	70-130		
o-Xylene	20.4		µg/l		20.0	BRL	102	70-130		
Tetrahydrofuran	15.0		µg/l		20.0	BRL	75	70-130		
Ethyl ether	12.6	QM7	µg/l		20.0	BRL	63	70-130		
Tert-amyl methyl ether	19.8		µg/l		20.0	BRL	99	70-130		
Ethyl tert-butyl ether	21.8		µg/l		20.0	BRL	109	70-130		
Di-isopropyl ether	19.6		µg/l		20.0	BRL	98	70-130		
Tert-Butanol / butyl alcohol	225		µg/l		200	BRL	113	70-130		
1,4-Dioxane	165		µg/l		200	BRL	83	70-130		
trans-1,4-Dichloro-2-butene	21.3		µg/l		20.0	BRL	106	70-130		
Ethanol	416		µg/l		400	BRL	104	70-130		
Surrogate: 4-Bromofluorobenzene	31.6		µg/l		30.0		106	70-130		
Surrogate: Toluene-d8	30.0		µg/l		30.0		100	70-130		
Surrogate: 1,2-Dichloroethane-d4	32.8		µg/l		30.0		110	70-130		
Surrogate: Dibromofluoromethane	34.1		µg/l		30.0		114	70-130		
<u>Matrix Spike Dup (1331099-MSD1)</u>										
Source: SB82287-03RE1 Prepared & Analyzed: 27-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	14.4		µg/l		20.0	BRL	72	70-130	10	20
Acetone	18.9		µg/l		20.0	BRL	95	70-130	3	20
Acrylonitrile	17.7		µg/l		20.0	BRL	89	70-130	4	20
Benzene	13.5	QM7	µg/l		20.0	BRL	67	70-130	2	20
Bromobenzene	20.1		µg/l		20.0	BRL	100	70-130	3	20
Bromochloromethane	16.7		µg/l		20.0	BRL	83	70-130	0.5	20
Bromodichloromethane	22.6		µg/l		20.0	BRL	113	70-130	2	20
Bromoform	22.4		µg/l		20.0	BRL	112	70-130	5	20
Bromomethane	7.82	QM7	µg/l		20.0	BRL	39	70-130	4	20
2-Butanone (MEK)	19.0		µg/l		20.0	BRL	95	70-130	15	20
n-Butylbenzene	21.2		µg/l		20.0	BRL	106	70-130	2	20
sec-Butylbenzene	21.0		µg/l		20.0	BRL	105	70-130	5	20
tert-Butylbenzene	21.0		µg/l		20.0	BRL	105	70-130	3	20
Carbon disulfide	2.05	QM7	µg/l		20.0	BRL	10	70-130	5	20
Carbon tetrachloride	17.0		µg/l		20.0	BRL	85	70-130	4	20
Chlorobenzene	17.8		µg/l		20.0	BRL	89	70-130	6	20
Chloroethane	8.65	QM7	µg/l		20.0	BRL	43	70-130	0.1	20
Chloroform	18.7		µg/l		20.0	BRL	94	70-130	2	20
Chloromethane	5.72	QM7	µg/l		20.0	BRL	29	70-130	0.9	20
2-Chlorotoluene	22.2		µg/l		20.0	BRL	111	70-130	6	20
4-Chlorotoluene	21.7		µg/l		20.0	BRL	109	70-130	5	20
1,2-Dibromo-3-chloropropane	22.1		µg/l		20.0	BRL	110	70-130	3	20
Dibromochloromethane	21.8		µg/l		20.0	BRL	109	70-130	5	20
1,2-Dibromoethane (EDB)	17.7		µg/l		20.0	BRL	88	70-130	6	20
Dibromomethane	17.2		µg/l		20.0	BRL	86	70-130	4	20
1,2-Dichlorobenzene	20.6		µg/l		20.0	BRL	103	70-130	4	20
1,3-Dichlorobenzene	21.5		µg/l		20.0	BRL	108	70-130	4	20
1,4-Dichlorobenzene	19.9		µg/l		20.0	BRL	99	70-130	1	20
Dichlorodifluoromethane (Freon12)	7.71	QM7	µg/l		20.0	BRL	39	70-130	7	20
1,1-Dichloroethane	17.1		µg/l		20.0	BRL	86	70-130	2	20
1,2-Dichloroethane	17.2		µg/l		20.0	BRL	86	70-130	3	20
1,1-Dichloroethene	9.62	QM7	µg/l		20.0	BRL	48	70-130	10	20

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331099 - SW846 5030 Water MS										
<u>Matrix Spike Dup (1331099-MSD1)</u>										
cis-1,2-Dichloroethene	16.1		µg/l		20.0	BRL	81	70-130	4	20
trans-1,2-Dichloroethene	10.8	QM7	µg/l		20.0	BRL	54	70-130	0.8	20
1,2-Dichloropropane	18.2		µg/l		20.0	BRL	91	70-130	2	20
1,3-Dichloropropane	18.9		µg/l		20.0	BRL	95	70-130	6	20
2,2-Dichloropropane	20.7		µg/l		20.0	BRL	104	70-130	7	20
1,1-Dichloropropene	11.2	QM7	µg/l		20.0	BRL	56	70-130	7	20
cis-1,3-Dichloropropene	18.8		µg/l		20.0	BRL	94	70-130	2	20
trans-1,3-Dichloropropene	19.8		µg/l		20.0	BRL	99	70-130	7	20
Ethylbenzene	17.7		µg/l		20.0	BRL	89	70-130	7	20
Hexachlorobutadiene	22.8		µg/l		20.0	BRL	114	70-130	4	20
2-Hexanone (MBK)	18.7		µg/l		20.0	BRL	94	70-130	4	20
Isopropylbenzene	20.0		µg/l		20.0	BRL	100	70-130	5	20
4-Isopropyltoluene	21.4		µg/l		20.0	BRL	107	70-130	1	20
Methyl tert-butyl ether	20.0		µg/l		20.0	BRL	100	70-130	3	20
4-Methyl-2-pentanone (MIBK)	18.8		µg/l		20.0	BRL	94	70-130	0.9	20
Methylene chloride	13.8	QM7	µg/l		20.0	BRL	69	70-130	2	20
Naphthalene	18.5		µg/l		20.0	BRL	93	70-130	2	20
n-Propylbenzene	19.1		µg/l		20.0	BRL	96	70-130	6	20
Styrene	20.2		µg/l		20.0	BRL	101	70-130	7	20
1,1,1,2-Tetrachloroethane	22.0		µg/l		20.0	BRL	110	70-130	5	20
1,1,2,2-Tetrachloroethane	23.0		µg/l		20.0	BRL	115	70-130	17	20
Tetrachloroethene	14.7		µg/l		20.0	BRL	73	70-130	1	20
Toluene	16.0		µg/l		20.0	BRL	80	70-130	0	20
1,2,3-Trichlorobenzene	20.5		µg/l		20.0	BRL	102	70-130	2	20
1,2,4-Trichlorobenzene	20.1		µg/l		20.0	BRL	100	70-130	4	20
1,3,5-Trichlorobenzene	21.0		µg/l		20.0	BRL	105	70-130	2	20
1,1,1-Trichloroethane	18.4		µg/l		20.0	BRL	92	70-130	7	20
1,1,2-Trichloroethane	20.6		µg/l		20.0	BRL	103	70-130	1	20
Trichloroethene	14.9		µg/l		20.0	BRL	74	70-130	2	20
Trichlorofluoromethane (Freon 11)	11.2	QM7	µg/l		20.0	BRL	56	70-130	8	20
1,2,3-Trichloropropane	20.1		µg/l		20.0	BRL	100	70-130	6	20
1,2,4-Trimethylbenzene	19.7		µg/l		20.0	BRL	99	70-130	5	20
1,3,5-Trimethylbenzene	19.7		µg/l		20.0	BRL	99	70-130	6	20
Vinyl chloride	7.16	QM7	µg/l		20.0	BRL	36	70-130	5	20
m,p-Xylene	36.3		µg/l		40.0	BRL	91	70-130	6	20
o-Xylene	19.8		µg/l		20.0	BRL	99	70-130	3	20
Tetrahydrofuran	14.6		µg/l		20.0	BRL	73	70-130	3	20
Ethyl ether	12.6	QM7	µg/l		20.0	BRL	63	70-130	0	20
Tert-amyl methyl ether	19.2		µg/l		20.0	BRL	96	70-130	3	20
Ethyl tert-butyl ether	19.9		µg/l		20.0	BRL	99	70-130	9	20
Di-isopropyl ether	19.3		µg/l		20.0	BRL	97	70-130	1	20
Tert-Butanol / butyl alcohol	208		µg/l		200	BRL	104	70-130	8	20
1,4-Dioxane	160		µg/l		200	BRL	80	70-130	3	20
trans-1,4-Dichloro-2-butene	19.8		µg/l		20.0	BRL	99	70-130	7	20
Ethanol	393		µg/l		400	BRL	98	70-130	6	20
Surrogate: 4-Bromofluorobenzene	31.2		µg/l		30.0		104	70-130		
Surrogate: Toluene-d8	30.8		µg/l		30.0		103	70-130		
Surrogate: 1,2-Dichloroethane-d4	32.1		µg/l		30.0		107	70-130		
Surrogate: Dibromofluoromethane	31.7		µg/l		30.0		106	70-130		

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331108 - SW846 3005A										
<u>Blank (1331108-BLK1)</u>										
Iron	< 0.0150		mg/l	0.0150						
Sodium	< 0.250		mg/l	0.250						
Manganese	< 0.0020		mg/l	0.0020						
Arsenic	< 0.0040		mg/l	0.0040						
Zinc	< 0.0075		mg/l	0.0075						
Lead	< 0.0075		mg/l	0.0075						
Nickel	< 0.0050		mg/l	0.0050						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Barium	< 0.0050		mg/l	0.0050						
Copper	< 0.0050		mg/l	0.0050						
<u>LCS (1331108-BS1)</u>										
Manganese	1.36		mg/l	0.0020	1.25	108	85-115			
Sodium	6.61		mg/l	0.250	6.25	106	85-115			
Iron	1.38		mg/l	0.0150	1.25	110	85-115			
Zinc	1.19		mg/l	0.0075	1.25	95	85-115			
Chromium	1.28		mg/l	0.0050	1.25	102	85-115			
Copper	1.29		mg/l	0.0050	1.25	104	85-115			
Barium	1.34		mg/l	0.0050	1.25	107	85-115			
Arsenic	1.29		mg/l	0.0040	1.25	103	85-115			
Lead	1.24		mg/l	0.0075	1.25	99	85-115			
Cadmium	1.24		mg/l	0.0025	1.25	100	85-115			
Nickel	1.24		mg/l	0.0050	1.25	100	85-115			
<u>LCS Dup (1331108-BSD1)</u>										
Sodium	6.38		mg/l	0.250	6.25	102	85-115	3	20	
Manganese	1.29		mg/l	0.0020	1.25	103	85-115	5	20	
Iron	1.35		mg/l	0.0150	1.25	108	85-115	2	20	
Lead	1.24		mg/l	0.0075	1.25	99	85-115	0.1	20	
Nickel	1.24		mg/l	0.0050	1.25	99	85-115	0.3	20	
Copper	1.25		mg/l	0.0050	1.25	100	85-115	3	20	
Arsenic	1.26		mg/l	0.0040	1.25	101	85-115	2	20	
Zinc	1.18		mg/l	0.0075	1.25	94	85-115	1	20	
Chromium	1.22		mg/l	0.0050	1.25	97	85-115	5	20	
Cadmium	1.22		mg/l	0.0025	1.25	98	85-115	2	20	
Barium	1.28		mg/l	0.0050	1.25	102	85-115	5	20	
<u>Duplicate (1331108-DUP1)</u>										
Sodium	80.3		mg/l	0.250		76.4		5	20	
Manganese	0.269		mg/l	0.0020		0.255		5	20	
Iron	0.264		mg/l	0.0150		0.284		7	20	
Arsenic	< 0.0040		mg/l	0.0040		BRL				
Lead	< 0.0075		mg/l	0.0075		BRL				
Nickel	0.0086		mg/l	0.0050		0.0084		2	20	
Copper	0.0064		mg/l	0.0050		0.0060		6	20	
Chromium	0.0018	J	mg/l	0.0050		0.0018		0	20	
Cadmium	< 0.0025		mg/l	0.0025		BRL				
Zinc	0.0364	R06	mg/l	0.0075		0.0334		9	20	
Barium	0.0096		mg/l	0.0050		0.0087		9	20	
<u>Matrix Spike (1331108-MS1)</u>										
Iron	1.62		mg/l	0.0150	1.25	0.284	107	75-125		
Manganese	1.53		mg/l	0.0020	1.25	0.255	102	75-125		
Sodium	84.4	QM2	mg/l	0.250	6.25	76.4	127	75-125		

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331108 - SW846 3005A										
<u>Matrix Spike (1331108-MS1)</u>										
Lead										
1.21										
Arsenic										
1.30										
Nickel										
1.20										
Copper										
1.25										
Chromium										
1.20										
Cadmium										
1.20										
Barium										
1.29										
Zinc										
1.17										
<u>Matrix Spike Dup (1331108-MSD1)</u>										
Manganese										
1.50										
Sodium										
81.4										
Iron										
1.58										
Cadmium										
1.17										
Zinc										
1.17										
Nickel										
1.19										
Barium										
1.25										
Lead										
1.19										
Chromium										
1.17										
Copper										
1.21										
Arsenic										
1.28										
<u>Post Spike (1331108-PS1)</u>										
Iron										
1.66										
Sodium										
82.2										
Manganese										
1.61										
Cadmium										
1.23										
Nickel										
1.24										
Lead										
1.24										
Zinc										
1.22										
Barium										
1.35										
Arsenic										
1.36										
Copper										
1.29										
Chromium										
1.27										
<u>Source: SB82287-01</u>										
Prepared: 30-Dec-13 Analyzed: 02-Jan-14										

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Soluble Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331109 - SW846 3005A										
<u>Blank (1331109-BLK1)</u>										
Manganese	< 0.0020		mg/l	0.0020						
Sodium	< 0.250		mg/l	0.250						
Iron	< 0.0150		mg/l	0.0150						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Barium	< 0.0050		mg/l	0.0050						
Lead	< 0.0075		mg/l	0.0075						
Zinc	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
Copper	< 0.0050		mg/l	0.0050						
Nickel	< 0.0050		mg/l	0.0050						
<u>LCS (1331109-BS1)</u>										
Iron	1.22		mg/l	0.0150	1.25	98	85-115			
Manganese	1.12		mg/l	0.0020	1.25	90	85-115			
Sodium	6.46		mg/l	0.250	6.25	103	85-115			
Zinc	1.24		mg/l	0.0050	1.25	99	85-115			
Lead	1.25		mg/l	0.0075	1.25	100	85-115			
Nickel	1.19		mg/l	0.0050	1.25	95	85-115			
Cadmium	1.34		mg/l	0.0025	1.25	107	85-115			
Barium	1.22		mg/l	0.0050	1.25	97	85-115			
Arsenic	1.25		mg/l	0.0040	1.25	100	85-115			
Copper	1.20		mg/l	0.0050	1.25	96	85-115			
Chromium	1.25		mg/l	0.0050	1.25	100	85-115			
<u>LCS Dup (1331109-BSD1)</u>										
Iron	1.25		mg/l	0.0150	1.25	100	85-115	3	20	
Manganese	1.14		mg/l	0.0020	1.25	91	85-115	2	20	
Sodium	6.50		mg/l	0.250	6.25	104	85-115	0.7	20	
Copper	1.20		mg/l	0.0050	1.25	96	85-115	0.6	20	
Arsenic	1.27		mg/l	0.0040	1.25	101	85-115	1	20	
Barium	1.23		mg/l	0.0050	1.25	99	85-115	1	20	
Chromium	1.25		mg/l	0.0050	1.25	100	85-115	0.1	20	
Zinc	1.26		mg/l	0.0050	1.25	101	85-115	2	20	
Nickel	1.20		mg/l	0.0050	1.25	96	85-115	0.7	20	
Lead	1.27		mg/l	0.0075	1.25	101	85-115	1	20	
Cadmium	1.35		mg/l	0.0025	1.25	108	85-115	0.7	20	
<u>Duplicate (1331109-DUP1)</u>										
					Source: SB82287-07					
Iron	0.0119	J	mg/l	0.0150		BRL				20
Manganese	< 0.0020		mg/l	0.0020		BRL				20
Sodium	56.6		mg/l	0.250	57.0			0.7	20	
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Copper	< 0.0050		mg/l	0.0050	0.0013					20
Barium	0.0396		mg/l	0.0050	0.0401			1	20	
Chromium	< 0.0050		mg/l	0.0050		BRL				20
Nickel	0.0015	J,QR8	mg/l	0.0050	0.0025			50	20	
Lead	< 0.0075		mg/l	0.0075		BRL				20
Zinc	0.0028	J	mg/l	0.0050	0.0034			16	20	
Arsenic	< 0.0040		mg/l	0.0040		BRL				20
<u>Matrix Spike (1331109-MS1)</u>										
					Source: SB82287-07					
Sodium	64.6		mg/l	0.250	6.25	57.0	122	75-125		
Iron	1.22		mg/l	0.0150	1.25	BRL	98	75-125		
Manganese	1.11		mg/l	0.0020	1.25	BRL	89	75-125		

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Soluble Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331109 - SW846 3005A										
<u>Matrix Spike (1331109-MS1)</u>										
Chromium										
1.23										
Barium										
1.26										
Copper										
1.17										
Zinc										
1.23										
Lead										
1.23										
Cadmium										
1.33										
Arsenic										
1.26										
Nickel										
1.18										
<u>Matrix Spike Dup (1331109-MSD1)</u>										
Iron										
1.20										
Manganese										
1.10										
Sodium										
63.4										
Arsenic										
1.26										
Copper										
1.19										
Barium										
1.23										
Chromium										
1.23										
Cadmium										
1.33										
Zinc										
1.24										
Lead										
1.22										
Nickel										
1.16										
<u>Post Spike (1331109-PS1)</u>										
Iron										
1.30										
Manganese										
1.18										
Sodium										
66.7										
QM4X										
0.250										
Barium										
1.33										
Zinc										
1.31										
Lead										
1.30										
Nickel										
1.24										
Cadmium										
1.40										
Arsenic										
1.34										
Copper										
1.25										
Chromium										
1.29										

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330605 - General Preparation										
<u>Blank (1330605-BLK1)</u>										
Nitrite as N	< 0.100		mg/l	0.100						
Chloride	< 1.00		mg/l	1.00						
Sulfate as SO4	< 1.00		mg/l	1.00						
Nitrate as N	< 0.100		mg/l	0.100						
<u>LCS (1330605-BS1)</u>										
Nitrite as N	1.93		mg/l	0.100	2.00		96	90-110		
Chloride	19.1		mg/l	1.00	20.0		95	90-110		
Sulfate as SO4	18.5		mg/l	1.00	20.0		93	90-110		
Nitrate as N	1.88		mg/l	0.100	2.00		94	90-110		
<u>Calibration Blank (1330605-CCB1)</u>										
Nitrite as N	0.00		mg/l							
Chloride	0.00		mg/l							
Sulfate as SO4	0.00900		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Blank (1330605-CCB2)</u>										
Chloride	0.00100		mg/l							
Sulfate as SO4	0.00900		mg/l							
Nitrite as N	0.00		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Blank (1330605-CCB3)</u>										
Nitrite as N	0.00		mg/l							
Sulfate as SO4	0.0100		mg/l							
Chloride	0.00100		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Blank (1330605-CCB4)</u>										
Chloride	0.00100		mg/l							
Nitrite as N	0.00		mg/l							
Sulfate as SO4	0.0100		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Blank (1330605-CCB5)</u>										
Nitrite as N	0.00		mg/l							
Chloride	0.00100		mg/l							
Sulfate as SO4	0.0120		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Blank (1330605-CCB6)</u>										
Chloride	0.00300		mg/l							
Sulfate as SO4	0.0110		mg/l							
Nitrite as N	0.00		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Blank (1330605-CCB7)</u>										
Chloride	0.00200		mg/l							
Sulfate as SO4	0.0150		mg/l							
Nitrite as N	0.00		mg/l							
Nitrate as N	0.00		mg/l							
<u>Calibration Check (1330605-CCV1)</u>										
Chloride	20.2		mg/l	1.00	20.0		101	90-110		
Nitrite as N	2.05		mg/l	0.100	2.00		103	90-110		
Sulfate as SO4	21.8		mg/l	1.00	20.0		109	90-110		
Nitrate as N	2.00		mg/l	0.100	2.00		100	90-110		
<u>Calibration Check (1330605-CCV2)</u>										

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330605 - General Preparation										
<u>Calibration Check (1330605-CCV2)</u>										
Sulfate as SO ₄	19.2		mg/l	1.00	20.0		96	90-110		
Chloride	19.9		mg/l	1.00	20.0		100	90-110		
Nitrite as N	2.02		mg/l	0.100	2.00		101	90-110		
Nitrate as N	1.96		mg/l	0.100	2.00		98	90-110		
<u>Calibration Check (1330605-CCV3)</u>										
Nitrite as N	1.97		mg/l	0.100	2.00		98	90-110		
Sulfate as SO ₄	18.2		mg/l	1.00	20.0		91	90-110		
Chloride	19.5		mg/l	1.00	20.0		97	90-110		
Nitrate as N	1.92		mg/l	0.100	2.00		96	90-110		
<u>Calibration Check (1330605-CCV4)</u>										
Chloride	19.0		mg/l	1.00	20.0		95	90-110		
Nitrite as N	1.92		mg/l	0.100	2.00		96	90-110		
Sulfate as SO ₄	18.0		mg/l	1.00	20.0		90	90-110		
Nitrate as N	1.87		mg/l	0.100	2.00		93	90-110		
<u>Calibration Check (1330605-CCV5)</u>										
Sulfate as SO ₄	19.5		mg/l	1.00	20.0		97	90-110		
Chloride	20.6		mg/l	1.00	20.0		103	90-110		
Nitrite as N	2.09		mg/l	0.100	2.00		104	90-110		
Nitrate as N	2.04		mg/l	0.100	2.00		102	90-110		
<u>Calibration Check (1330605-CCV6)</u>										
Chloride	20.5		mg/l	1.00	20.0		102	90-110		
Nitrite as N	2.07		mg/l	0.100	2.00		104	90-110		
Sulfate as SO ₄	19.5		mg/l	1.00	20.0		98	90-110		
Nitrate as N	2.03		mg/l	0.100	2.00		101	90-110		
<u>Calibration Check (1330605-CCV7)</u>										
Sulfate as SO ₄	20.0		mg/l	1.00	20.0		100	90-110		
Chloride	20.3		mg/l	1.00	20.0		101	90-110		
Nitrite as N	2.05		mg/l	0.100	2.00		102	90-110		
Nitrate as N	2.01		mg/l	0.100	2.00		100	90-110		
<u>Reference (1330605-SRM1)</u>										
Chloride	26.3		mg/l	1.00	25.0		105	90-110		
Nitrite as N	2.73		mg/l	0.100	2.50		109	90-110		
Sulfate as SO ₄	27.0		mg/l	1.00	25.0		108	90-110		
Nitrate as N	2.73		mg/l	0.100	2.50		109	90-110		
Batch 1330662 - General Preparation										
<u>Blank (1330662-BLK1)</u>										
Ammonia as N	< 0.100		mg/l	0.100						
<u>LCS (1330662-BS1)</u>										
Ammonia as N	2.29		mg/l	0.100	2.50		92	90-110		
<u>Reference (1330662-SRM1)</u>										
Ammonia as N	0.980		mg/l	0.100	1.04		95	84-116		
Batch 1330681 - General Preparation										
<u>Blank (1330681-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0						
<u>LCS (1330681-BS1)</u>										
Total Suspended Solids	104		mg/l	10.0	100		104	90-110		
Batch 1330740 - General Preparation										
<u>Blank (1330740-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0						
<u>LCS (1330740-BS1)</u>										
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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330740 - General Preparation										
<u>LCS (1330740-BS1)</u>										
Total Suspended Solids	106		mg/l	10.0	100	106	90-110			
<u>Duplicate (1330740-DUP1)</u>				<u>Source: SB82287-04</u>						
Total Suspended Solids	< 5.0		mg/l	5.0		BRL			20	
<u>Duplicate (1330740-DUP2)</u>				<u>Source: SB82287-05</u>						
Total Suspended Solids	13.0		mg/l	5.0		12.0			8	20
Batch 1330741 - General Preparation										
<u>Blank (1330741-BLK1)</u>										
Total Dissolved Solids	< 5		mg/l	5						
<u>LCS (1330741-BS1)</u>										
Total Dissolved Solids	938		mg/l	10	1000	94	90-110			
Batch 1330755 - General Preparation										
<u>Blank (1330755-BLK1)</u>										
Total Dissolved Solids	< 5		mg/l	5						
<u>LCS (1330755-BS1)</u>										
Total Dissolved Solids	948		mg/l	10	1000	95	90-110			
<u>Duplicate (1330755-DUP1)</u>				<u>Source: SB82287-05</u>						
Total Dissolved Solids	199		mg/l	5		190			5	20
<u>Duplicate (1330755-DUP2)</u>				<u>Source: SB82287-06</u>						
Total Dissolved Solids	112		mg/l	5		109			3	20
Batch 1331033 - General Preparation										
<u>Blank (1331033-BLK1)</u>										
Total Organic Carbon	< 1.00		mg/l	1.00						
<u>LCS (1331033-BS1)</u>										
Total Organic Carbon	16.0		mg/l	1.00	15.0	106	85-115			
<u>Calibration Blank (1331033-CCB1)</u>										
Total Organic Carbon	0.273		mg/l							
<u>Calibration Blank (1331033-CCB2)</u>										
Total Organic Carbon	0.292		mg/l							
<u>Calibration Blank (1331033-CCB3)</u>										
Total Organic Carbon	0.327		mg/l							
<u>Calibration Blank (1331033-CCB4)</u>										
Total Organic Carbon	0.330		mg/l							
<u>Calibration Blank (1331033-CCB5)</u>										
Total Organic Carbon	0.299		mg/l							
<u>Calibration Check (1331033-CCV1)</u>										
Total Organic Carbon	4.84		mg/l	1.00	5.00	97	85-115			
<u>Calibration Check (1331033-CCV2)</u>										
Total Organic Carbon	5.11		mg/l	1.00	5.00	102	85-115			
<u>Calibration Check (1331033-CCV3)</u>										
Total Organic Carbon	4.81		mg/l	1.00	5.00	96	85-115			
<u>Calibration Check (1331033-CCV4)</u>										
Total Organic Carbon	4.95		mg/l	1.00	5.00	99	85-115			
<u>Calibration Check (1331033-CCV5)</u>										
Total Organic Carbon	4.96		mg/l	1.00	5.00	99	85-115			
<u>Duplicate (1331033-DUP2)</u>				<u>Source: SB82287-06</u>						
Total Organic Carbon	1.30		mg/l	1.00		1.58			19	20
<u>Reference (1331033-SRM1)</u>										
Total Organic Carbon	8.19		mg/l	1.00	8.20	100	87-113			
Batch 1331076 - General Preparation										

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331076 - General Preparation										
<u>Blank (1331076-BLK1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>Blank (1331076-BLK2)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>LCS (1331076-BS1)</u>										
Cyanide (total)	0.306		mg/l	0.00500	0.300		102	90-110		
<u>LCS (1331076-BS2)</u>										
Cyanide (total)	0.312		mg/l	0.00500	0.300		104	90-110		
<u>Reference (1331076-SRM1)</u>										
Cyanide (total)	0.156		mg/l	0.00500	0.168		93	74.9-125		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 263250A - 263250										
<u>BLK (BF92186-BLK)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	< 0.015		mg/L	0.015					-	
<u>DUP (BF92186-DUP)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	ND		mg/L				0.019	-	0	20
<u>LCS (BF92186-LCS)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	ND		mg/L				107	70-130		20
<u>MS (BF92186-MS)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	ND		mg/L				96.0	70-130		20

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Notes and Definitions

D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QCR	Sample data reported for QC purposes only.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM4X	The spike recovery was outside of QC acceptance limits for the MS, MSD and/or PS due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.
R01	The Reporting Limit has been raised to account for matrix interference.
R06	IMRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
LIV	The initial volume for this sample has been reduced due to sample matrix and/or historical data therefore elevating the reporting limit.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor
Kimberly Wisk
Rebecca Merz



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

SB82287 BY

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
· All TAT's subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Invoice To: Kris S. binga
Envirite Corporation
PO Box 591
Chappaqua, NY 10514

Telephone #: 603-703-5534
Project Mgr. John Noble

P.O. No.: RQN: 7694

Project No.: 03-14218 G2

Site Name: Envirite RCRA Landf. II

Location: Thomaston State: CT

Sampler(s): Luke C / John V

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH 12=

8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11=

List preservative code below:
4 2 10 5 4 3

QA/QC Reporting Notes:
* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air

X1=Trip Blank X2=Equipment Blank X3=

MA DEP MCP CAM Report: Yes No

CT DPH RCP Report: Yes No

QA/QC Reporting Level

- Standard No QC DQA*
- NY ASP A* NY ASP B*
- NJ Reduced* NJ Full*
- TIER II* TIER IV*
- Other CT RCP CT RSRC

State-specific reporting standards:

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:			Analyses:								
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Total Cyanide	Total Cu, Cr, Fe, Zn	Ammonia as N	Total Phenolics	Nitrite as N	Nitrate as N	Chloride, Sulfate	TDS, TSS
82287-01	MW-30/20131218	12-18-13	1435	G	GW	5	1	5	5	X	X	X	X	X	X	X	X
02	TB-20131219	12-19-13	0800	X1		1				X							
03	MW-63/20131219		0900		GW	5	1	5	5	X	X	X	X	X	X	X	X
04	MW-325/20131219		1100			5	1	5	5	X	X	X	X	X	X	X	X
05	MW-615/20131219		1315	(4)		5	1	5	5	X	X	X	X	X	X	X	X
06	MW-558/20131219		0840	(4)		5	1	5	5	X	X	X	X	X	X	X	X
07*	MW-615/20131219F		1315			5	1	5	5	X							Field Filtered.
08	MW-320/20131219		1100			5	1	5	5	X	X	X	X	X	X	X	
09	MW-618/20131219	12-19-13	1305	↓	GW	5	1	5	5	X	X	X	X	X	X	X	2.8 L / 1.8 IR
10	EB-20131218	12-18-13	1000	G	X2	5	1	5	5	X	X	X	X	X	X	X	12/19/13 UK

Relinquished by:

Received by:

Date: Time: Temp °C

12-19-13 1505
12/19/13 16:45

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

EDD Format Environ Equis 4-File

E-mail to jnobles@envircorp.com



CHAIN OF CUSTODY RECORD

SB82287 by

Special Handling:

- Standard TAT - 7 to 10 business days
 Rush TAT - Date Needed: _____
 - All TATs subject to laboratory approval.
 - Min. 24-hour notification needed for rushes.
 - Samples disposed of after 60 days unless otherwise instructed.

Page 1 of 1

Report To: ENVIRON

3 Carlisle Rd Suite 210
Westford, MA

Telephone #: 603-703-5534

Project Mgr. John Noble

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= 12=Invoice To: Kris S.binga
Envirite Corporation
PO Box 591
Chappaqua, NY 10514

P.O. No.: RQN: 7694

Project No.: 03-14218 G2

Site Name: Envirite RCRA Landf.ll

Location: Thomaston

State: CT

Sampler(s): Luke C / John U

List preservative code below:

4 2 10 5 4 3

QA/QC Reporting Notes:

* additional charges may apply

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air

X1=Trip Blank X2=Equipment Blank X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:			Analyses:			MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	As, Ba, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn	As, Ba, Cd, Cr, Cu, Fe, Pb, Mn, Ni, Zn	Ammonia as N, Total Phenolics	Nitrite as N, Nitrate as N	Chloride, Sulfate	TDS, TSS
82287-01	MW-30/20131218	12-18-13	1435	G	GW	5	1	5	5	X	X	X	X	X	X
02	TB-20131219	12-19-13	0800	X1		1				X					
03	MW-63/20131219		0900		GW	5	1	5	5	X	X	X	X	X	X
04	MW-325/20131219		1100			5	1	5	5	X	X	X	X	X	X
05	MW-615/20131219	(L)	1315	(L)		5	1	5	5	X	X	X	X	X	X
06	MW-558/20131219		0840	(L)		5	1	5	5	X	X	X	X	X	X
07*	MW-615/20131219F		1315			8	1	8	1	X					Field Filtered, 1 container
08	MW-320/20131219	↓	1100	↓	5	1	5	5	X	X	X	X	X	X	Received for - 07
09	MW-618/20131219	12-19-13	1305	↓	GW	5	1	5	5	X	X	X	X	X	2.8 L / 1.8 IR 03
10	EB-20131218	12-18-13	1000	G	X2	5	1	5	5	X	X	X	X	X	12/19/13 OK
Relinquished by:		Received by:		Date:		Time:		Temp°C		Condition upon receipt: Custody Seals: <input type="checkbox"/> Present <input type="checkbox"/> Intact <input type="checkbox"/> Broken				EDD Format Environ Equis 4-F.1.e	
<i>John Noble</i>		<i>Tom Smith</i>		12-18-13		1505				<input type="checkbox"/> Ambient <input checked="" type="checkbox"/> Iced <input type="checkbox"/> Refrigerated <input type="checkbox"/> DI VOA Frozen <input type="checkbox"/> Soil Jar Frozen				E-mail to jnoble@envirocorp.com	
11 Almgren Drive • Agawam, MA 01001 • 413-789-9018 • FAX 413-789-4076 • www.spectrum-analytical.com														Revised Feb 2013	

Report Date:
03-Jan-14 10:38

- Final Report
 Re-Issued Report
 Revised Report



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Laboratory Report

ENVIRON International Corporation
3 Carlisle Rd
Westford, MA 01886
Attn: John Noble

Project: Envirite RCRA Landfill - Thomaston, CT
Project #: 08-14218G2

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB82369-01	MW-61D/20131219	Ground Water	19-Dec-13 16:00	20-Dec-13 17:15
SB82369-02	MW-33/20131219	Ground Water	19-Dec-13 16:00	20-Dec-13 17:15
SB82369-03	DUP-20131220	Ground Water	20-Dec-13 00:00	20-Dec-13 17:15
SB82369-04	MW-43S/20131220	Ground Water	20-Dec-13 11:45	20-Dec-13 17:15
SB82369-05	MW-43D/20131220	Ground Water	20-Dec-13 13:15	20-Dec-13 17:15
SB82369-06	MW-31D/20131220	Ground Water	20-Dec-13 14:50	20-Dec-13 17:15
SB82369-07	TB-20131220	Trip Blank	20-Dec-13 08:00	20-Dec-13 17:15
SB82369-08	MW-44S/20131220	Ground Water	20-Dec-13 09:05	20-Dec-13 17:15
SB82369-09	MW-44D/20131220	Ground Water	20-Dec-13 10:45	20-Dec-13 17:15
SB82369-10	MW-44B/20131220	Ground Water	20-Dec-13 14:15	20-Dec-13 17:15

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435



Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 62 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Project Location: Envirite RCRA Landfill - Thomaston, CT

Sampling Date(s):

12/19/2013 through 12/20/2013

RCP Methods Used:

EPA 335.4 / SW846 9012B

SW846 6010C

SW846 8260C

Client: ENVIRON International Corporation - Westford, MA

Project Number: 08-14218G2

Laboratory Sample ID(s):

SB82369-01 through SB82369-10

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified preservation and holding time requirements met?	Yes <input checked="" type="checkbox"/> No
1B	<i>VPH and EPH methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes <input type="checkbox"/> No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes <input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes <input checked="" type="checkbox"/> No Yes <input type="checkbox"/> No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes <input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja
 Laboratory Director
 Date: 1/3/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 0.8 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

According to CTDEP RCP Quality Assurance and Quality Control Requirements for VOCs by method 8260, SW-846 version 1, 7/28/05 Table 1A, recovery for some VOC analytes have been deemed potentially difficult.

For this work order, the reporting limits have not been referenced or specified.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

Samples:

SB82369-10 MW-44B/20131220

The pH of this sample has been adjusted in the laboratory for the tests listed below in accordance with the preservation requirements of the applicable methods.

Cyanide, Total

EPA 300.0

Laboratory Control Samples:

1330725 SRM

Nitrate as N percent recovery is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219

EPA 300.0

Laboratory Control Samples:

1330725 SRM

Nitrite as N percent recovery is outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219

Spikes:

1330725-MS1 *Source: SB82369-10*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Chloride
Nitrite as N
Sulfate as SO₄

1330725-MSD1 *Source: SB82369-10*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Chloride
Nitrite as N
Sulfate as SO₄

Samples:

SB82369-01 *MW-61D/20131219*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SB82369-03 *DUP-20131220*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82369-04 *MW-43S/20131220*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82369-05 *MW-43D/20131220*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

EPA 300.0

Samples:

SB82369-06 *MW-31D/20131220*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sulfate as SO₄

SB82369-09 *MW-44D/20131220*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Nitrate as N
Sulfate as SO₄

SB82369-10 *MW-44B/20131220*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride
Sulfate as SO₄

SW846 6010C

Spikes:

1331196-MS1 *Source: SB82369-04*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

1331196-MSD1 *Source: SB82369-04*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Sodium

Duplicates:

1331196-DUP1 *Source: SB82369-04*

IMRL raised to correlate to batch QC reporting limits.

Sodium

Samples:

SB82369-01 *MW-61D/20131219*

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-02 *MW-33/20131219*

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-03 *DUP-20131220*

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-04 *MW-43S/20131220*

SW846 6010C

Samples:

SB82369-04 MW-43S/20131220

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-05 MW-43D/20131220

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-06 MW-31D/20131220

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-08 MW-44S/20131220

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-09 MW-44D/20131220

IMRL raised to correlate to batch QC reporting limits.

Sodium

SB82369-10 MW-44B/20131220

IMRL raised to correlate to batch QC reporting limits.

Sodium

SW846 8260C

Calibration:

1312086

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane

1,1,1-Trichloroethane

1,1,2-Trichloroethane

1,2-Dibromo-3-chloropropane

1,2-Dibromoethane (EDB)

1,2-Dichloroethane

2-Hexanone (MBK)

4-Methyl-2-pentanone (MIBK)

Acetone

Bromodichloromethane

Bromoform

Carbon disulfide

Carbon tetrachloride

cis-1,3-Dichloropropene

Dibromochloromethane

Dibromomethane

Ethanol

Tert-Butanol / butyl alcohol

trans-1,3-Dichloropropene

trans-1,4-Dichloro-2-butene

SW846 8260C

Calibration:

1312086

This affected the following samples:

1331097-BLK1
1331097-BS1
1331097-BSD1
1331097-MS1
1331097-MSD1
DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219
S315629-ICV1
S315750-CCV1
TB-20131220

1312093

Analyte quantified by quadratic equation type calibration.

1,1,2,2-Tetrachloroethane
1,1,2-Trichlorotrifluoroethane (Freon 113)
1,2,3-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,3,5-Trimethylbenzene
Bromoform
Carbon disulfide
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
Naphthalene
n-Butylbenzene
sec-Butylbenzene
tert-Butylbenzene
trans-1,3-Dichloropropene
trans-1,4-Dichloro-2-butene
Trichlorofluoromethane (Freon 11)
Vinyl chloride

This affected the following samples:

1331164-BLK1
1331164-BS1
1331164-BSD1
MW-44D/20131220
S315781-CCV1
S315794-ICV1

Laboratory Control Samples:

1331097 BS/BSD

SW846 8260C

Laboratory Control Samples:

1331097 BS/BSD

2,2-Dichloropropane percent recoveries (148/133) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219
TB-20131220

Acetone percent recoveries (137/132) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219
TB-20131220

Ethanol percent recoveries (142/146) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219
TB-20131220

1331097 BSD

1,4-Dioxane RPD 27% (20%) is outside individual acceptance criteria.

Spikes:

1331097-MS1 *Source: SB82369-09*

Analyte out of acceptance range in QC spike but no reportable concentration present in sample.

Ethanol

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Acetone
Dichlorodifluoromethane (Freon12)

1331097-MSD1 *Source: SB82369-09*

This laboratory report is not valid without an authorized signature on the cover page.

SW846 8260C

Spikes:

1331097-MSD1 *Source: SB82369-09*

RPD out of acceptance range.

1,1,2-Trichlorotrifluoroethane (Freon 113)
1,1-Dichloroethene
1,4-Dioxane
Acetone
Bromochloromethane
Bromomethane
Carbon disulfide
Chloroethane
Chloromethane
cis-1,2-Dichloroethene
Ethanol
Tetrachloroethene
trans-1,2-Dichloroethene
Trichloroethene
Trichlorofluoromethane (Freon 11)

Samples:

S315750-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

2,2-Dichloropropane (45.6%)
Tert-amyl methyl ether (-25.6%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

cis-1,3-Dichloropropene (25.6%)
Ethanol (23.9%)
trans-1,3-Dichloropropene (25.4%)
trans-1,4-Dichloro-2-butene (24.0%)

This affected the following samples:

1331097-BLK1
1331097-BS1
1331097-BSD1
1331097-MS1
1331097-MSD1
DUP-20131220
MW-31D/20131220
MW-33/20131219
MW-43D/20131220
MW-43S/20131220
MW-44B/20131220
MW-44D/20131220
MW-44S/20131220
MW-61D/20131219
TB-20131220

S315781-CCV1

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Acetone (24.8%)

SW846 8260C

Samples:

S315781-CCV1

This affected the following samples:

1331164-BLK1
1331164-BS1
1331164-BSD1
MW-44D/20131220

SB82369-05 MW-43D/20131220

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82369-09 MW-44D/20131220

Sample data reported for QC purposes only.

Sample Acceptance Check Form

Client: ENVIRON International Corporation - Westford, MA
Project: Envirite RCRA Landfill - Thomaston, CT / 08-14218G2
Work Order: SB82369
Sample(s) received on: 12/20/2013
Received by: Jessica Hoffman

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
1. Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were samples refrigerated upon transfer to laboratory representative?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

MW-61D/20131219

SB82369-01

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 16:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-61D/20131219

SB82369-01

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 16:00

Received

20-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	96	70-130 %										
2037-26-5	Toluene-d8	103	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	81	70-130 %										
1868-53-7	Dibromofluoromethane	107	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330780
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Sample Identification

MW-61D/20131219

SB82369-01

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 16:00

Received

20-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0649		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0179		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.0037		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	102	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	196	GS1, D	mg/l	8.00	0.992	8	EPA 300.0	20-Dec-13	20-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	1.07		mg/l	0.100	0.0210	1	EPA 300.0	20-Dec-13 18:37	20-Dec-13 23:26	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13 18:37	20-Dec-13 23:26	"	"	X
	Total Dissolved Solids	385		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	30.5		mg/l	1.00	0.353	1	EPA 300.0	20-Dec-13	20-Dec-13	ELE	1330725	X
	Total Organic Carbon	< 1.00		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-33/20131219

SB82369-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 16:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-33/20131219

SB82369-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 16:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	97		70-130 %									
2037-26-5	Toluene-d8	104		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	107		70-130 %									
1868-53-7	Dibromofluoromethane	107		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330780
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Sample Identification

MW-33/20131219

SB82369-02

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

19-Dec-13 16:00

Received

20-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0314		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0268		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.0048		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	22.6	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	33.3		mg/l	1.00	0.124	1	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	27-Dec-13	RLT	1331076	X
14797-55-8	Nitrate as N	2.10		mg/l	0.100	0.0210	1	EPA 300.0	20-Dec-13	21-Dec-13 18:37	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37	"	"	X
	Total Dissolved Solids	136		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	31.4		mg/l	1.00	0.353	1	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	3.35		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

DUP-20131220

SB82369-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 00:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	3.33		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

DUP-20131220

SB82369-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 00:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	13.0		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	4.07		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	96			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	104			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	106			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	109			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			LNB	1330780	

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Sample Identification

DUP-20131220

SB82369-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 00:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	0.0112		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0736		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0142		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.126		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.0535		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	134	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	0.0130		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0137		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	255	GS1, D	mg/l	16.0	1.98	16	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	38.5	GS1, D	mg/l	1.60	0.336	16	EPA 300.0	20-Dec-13	21-Dec-13 18:37	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37	"	"	X
	Total Dissolved Solids	952		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	233	GS1, D	mg/l	16.0	5.65	16	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	2.30		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	14.6		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	'[none]'
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-43S/20131220

SB82369-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 11:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	3.32		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-43S/20131220

SB82369-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 11:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	13.5		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	4.17		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	94			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	102			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	105			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	109			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			LNB	1330780	

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Sample Identification

MW-43S/20131220

SB82369-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 11:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	0.0106		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0756		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0148		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.121		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.0535		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	138	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	0.0129		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0138		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	252	GS1, D	mg/l	16.0	1.98	16	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	38.1	GS1, D	mg/l	1.60	0.336	16	EPA 300.0	20-Dec-13	21-Dec-13 18:37 02:21	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37 02:01	"	"	X
	Total Dissolved Solids	897		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	220	GS1, D	mg/l	16.0	5.65	16	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	2.54		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	13.7		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	'[none]'
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	27-Dec-13	27-Dec-13	PH-06	263250A	

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Sample Identification

MW-43D/20131220

SB82369-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 13:15

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 50.0	D	µg/l	50.0	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromoform	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	72.0	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	"	"	"	"	"	X

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Sample Identification

MW-43D/20131220

SB82369-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 13:15

Received

20-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	16.6	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	38.6	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	6.10	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	X
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X
<i>Surrogate recoveries:</i>													
460-00-4	4-Bromofluorobenzene	95			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	96			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	102			70-130 %			"	"	"	"	"	
1868-53-7	Dibromofluoromethane	102			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													
Preservation		Field Preserved		N/A			1	EPA 200/6000 methods			LNB	1330780	

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Sample Identification

MW-43D/20131220

SB82369-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 13:15

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	0.0068		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0210		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	0.0045		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.653		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0602		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	1.85		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	158	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	0.203		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.548		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	1.84		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	348	GS1, D	mg/l	18.0	2.23	18	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	43.1	GS1, D	mg/l	1.80	0.378	18	EPA 300.0	20-Dec-13	21-Dec-13 18:37	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37	"	"	X
	Total Dissolved Solids	1,370		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	397	GS1, D	mg/l	18.0	6.35	18	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	2.27		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	65.8		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	'[none]'
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH-06	263339A	

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Sample Identification

MW-31D/20131220

SB82369-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 14:50

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	9.41		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-31D/20131220

SB82369-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 14:50

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	3.17		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	4.21		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94		70-130 %									
2037-26-5	Toluene-d8	97		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	101		70-130 %									
1868-53-7	Dibromofluoromethane	104		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330780
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Sample Identification

MW-31D/20131220

SB82369-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 14:50

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0162		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.400		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.182		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	29.4	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0099		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	1.06		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	48.9		mg/l	1.00	0.124	1	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	0.790		mg/l	0.100	0.0210	1	EPA 300.0	20-Dec-13	21-Dec-13 18:37	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37	"	"	X
	Total Dissolved Solids	313		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	110	GS1, D	mg/l	4.00	1.41	4	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	1.75		mg/l	1.00	0.283	1	SM 5310B	23-Dec-13	23-Dec-13	TDD	1331033	X
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH-06	263339A	

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Sample Identification

TB-20131220

SB82369-07

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

20-Dec-13 08:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

TB-20131220

SB82369-07

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

20-Dec-13 08:00

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	101	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	106	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	106	70-130 %	"	"	"	"	"	"	"	"	"	"

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Sample Identification

MW-44S/20131220

SB82369-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 09:05

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-44S/20131220

SB82369-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 09:05

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	93	70-130 %										
2037-26-5	Toluene-d8	102	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	108	70-130 %										
1868-53-7	Dibromofluoromethane	108	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330780
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Sample Identification

MW-44S/20131220

SB82369-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 09:05

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0227		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0481		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.0061		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	11.6	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	23.1		mg/l	1.00	0.124	1	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	3.34		mg/l	0.100	0.0210	1	EPA 300.0	20-Dec-13	21-Dec-13 18:37	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37	"	"	X
	Total Dissolved Solids	122		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	21-Dec-13	23-Dec-13	BD	1330740	X
14808-79-8	Sulfate as SO4	19.0		mg/l	1.00	0.353	1	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	1.76		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH-06	263339A	

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Sample Identification

MW-44D/20131220

SB82369-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 10:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 50.0	D	µg/l	50.0	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromoform	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	37.2	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	"	"	"	"	"	X

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Sample Identification

MW-44D/20131220

SB82369-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 10:45

Received

20-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	8.05	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	18.4	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	X
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	106	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	109	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	111	70-130 %	"	"	"	"	"	"	"	"	"	"

Re-analysis of Volatile Organic Compounds by SW846

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-44D/20131220

SB82369-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 10:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	28-Dec-13	29-Dec-13	GMA	1331164	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	38.6		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X

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Sample Identification

MW-44D/20131220

SB82369-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 10:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	SW846 8260C	28-Dec-13	29-Dec-13	GMA	1331164	X
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	11.4		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	19.0		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	2.28		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromo fluorobenzene	96	70-130 %	"	"	"	"
2037-26-5	Toluene-d8	102	70-130 %	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	103	70-130 %	"	"	"	"
1868-53-7	Dibromofluoromethane	103	70-130 %	"	"	"	"

Total Metals by EPA 200/6000 Series Methods

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Sample Identification

MW-44D/20131220

SB82369-09

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 10:45

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			LNB	1330780	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	0.0044		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0474		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0239		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0693		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.471		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	129	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	0.0240		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0382		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	0.676		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	237	GS1, D	mg/l	10.0	1.24	10	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	24.2	GS1, D	mg/l	1.00	0.210	10	EPA 300.0	20-Dec-13 18:37	21-Dec-13 05:00	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13 18:37	21-Dec-13 04:39	"	"	X
	Total Dissolved Solids	801		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	219	GS1, D	mg/l	10.0	3.53	10	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	1.75		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	33.1		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH-06	263339A	

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Sample Identification

MW-44B/20131220

SB82369-10

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 14:15

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	9.55		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-44B/20131220

SB82369-10

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 14:15

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	27-Dec-13	27-Dec-13	NAA	1331097	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	3.69		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	7.92		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	93	70-130 %
2037-26-5	Toluene-d8	104	70-130 %
17060-07-0	1,2-Dichloroethane-d4	108	70-130 %
1868-53-7	Dibromofluoromethane	112	70-130 %

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330780
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Sample Identification

MW-44B/20131220

SB82369-10

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

20-Dec-13 14:15

Received

20-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	30-Dec-13	31-Dec-13	EDT	1331196	X
7440-39-3	Barium	0.0242		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	0.0064		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.123		mg/l	0.0150	0.0074	1	"	"	31-Dec-13	"	"	X
7439-96-5	Manganese	0.0947		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	47.8	R06	mg/l	5.00	0.0325	1	"	"	31-Dec-13	"	"	X
7440-02-0	Nickel	0.0089		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0282		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	24-Dec-13	27-Dec-13	RLT	1330899	X
16887-00-6	Chloride	76.6	GS1, D	mg/l	3.00	0.372	3	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	27-Dec-13	30-Dec-13	RLT	1331153	X
14797-55-8	Nitrate as N	3.00		mg/l	0.100	0.0210	1	EPA 300.0	20-Dec-13	21-Dec-13 18:37	ELE	1330725	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	20-Dec-13	21-Dec-13 18:37	"	"	X
	Total Dissolved Solids	274		mg/l	5	3	1	SM2540C	23-Dec-13	26-Dec-13	BD	1330755	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	65.5	GS1, D	mg/l	3.00	1.06	3	EPA 300.0	20-Dec-13	21-Dec-13	ELE	1330725	X
	Total Organic Carbon	2.96		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	12.4		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH-06	263339A	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331097 - SW846 5030 Water MS										
<u>Blank (1331097-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331097 - SW846 5030 Water MS										
<u>Blank (1331097-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
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Surrogate: 4-Bromofluorobenzene	48.4		µg/l	50.0		97		70-130		
Surrogate: Toluene-d8	50.8		µg/l	50.0		102		70-130		
Surrogate: 1,2-Dichloroethane-d4	51.5		µg/l	50.0		103		70-130		
Surrogate: Dibromofluoromethane	51.6		µg/l	50.0		103		70-130		
<hr/>										
<u>LCS (1331097-BS1)</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.2		µg/l	20.0		111		70-130		
Acetone	27.4		µg/l	20.0		137		70-130		
Acrylonitrile	18.3		µg/l	20.0		92		70-130		
Benzene	18.3		µg/l	20.0		91		70-130		
Bromobenzene	21.8		µg/l	20.0		109		70-130		
Bromoform	20.2		µg/l	20.0		101		70-130		
Bromochloromethane	23.3		µg/l	20.0		116		70-130		
Bromodichloromethane	22.3		µg/l	20.0		112		70-130		
Bromoform	18.8		µg/l	20.0		94		70-130		
2-Butanone (MEK)	19.1		µg/l	20.0		96		70-130		
n-Butylbenzene	20.8		µg/l	20.0		104		70-130		
sec-Butylbenzene	20.3		µg/l	20.0		101		70-130		
tert-Butylbenzene	19.8		µg/l	20.0		99		70-130		
Carbon disulfide	20.5		µg/l	20.0		103		70-130		
Carbon tetrachloride	17.0		µg/l	20.0		85		70-130		
Chlorobenzene	21.2		µg/l	20.0		106		70-130		
Chloroethane	18.8		µg/l	20.0		94		70-130		
Chloroform	18.2		µg/l	20.0		91		70-130		
Chloromethane	19.9		µg/l	20.0		99		70-130		
2-Chlorotoluene	22.2		µg/l	20.0		111		70-130		
4-Chlorotoluene	23.1		µg/l	20.0		116		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331097 - SW846 5030 Water MS										
<u>LCS (1331097-BS1)</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
1,2-Dibromo-3-chloropropane	19.4		µg/l		20.0	97	70-130			
Dibromochloromethane	23.6		µg/l		20.0	118	70-130			
1,2-Dibromoethane (EDB)	21.0		µg/l		20.0	105	70-130			
Dibromomethane	21.1		µg/l		20.0	106	70-130			
1,2-Dichlorobenzene	21.2		µg/l		20.0	106	70-130			
1,3-Dichlorobenzene	23.1		µg/l		20.0	116	70-130			
1,4-Dichlorobenzene	20.9		µg/l		20.0	105	70-130			
Dichlorodifluoromethane (Freon12)	23.1		µg/l		20.0	115	70-130			
1,1-Dichloroethane	20.0		µg/l		20.0	100	70-130			
1,2-Dichloroethane	14.8		µg/l		20.0	74	70-130			
1,1-Dichloroethene	20.9		µg/l		20.0	104	70-130			
cis-1,2-Dichloroethene	19.8		µg/l		20.0	99	70-130			
trans-1,2-Dichloroethene	20.4		µg/l		20.0	102	70-130			
1,2-Dichloropropane	21.0		µg/l		20.0	105	70-130			
1,3-Dichloropropane	20.2		µg/l		20.0	101	70-130			
2,2-Dichloropropane	29.5	QC2	µg/l		20.0	148	70-130			
1,1-Dichloropropene	17.4		µg/l		20.0	87	70-130			
cis-1,3-Dichloropropene	24.9		µg/l		20.0	124	70-130			
trans-1,3-Dichloropropene	25.1		µg/l		20.0	126	70-130			
Ethylbenzene	19.8		µg/l		20.0	99	70-130			
Hexachlorobutadiene	20.0		µg/l		20.0	100	70-130			
2-Hexanone (MBK)	17.1		µg/l		20.0	86	70-130			
Isopropylbenzene	22.0		µg/l		20.0	110	70-130			
4-Isopropyltoluene	19.1		µg/l		20.0	95	70-130			
Methyl tert-butyl ether	22.3		µg/l		20.0	112	70-130			
4-Methyl-2-pentanone (MIBK)	17.9		µg/l		20.0	89	70-130			
Methylene chloride	17.6		µg/l		20.0	88	70-130			
Naphthalene	18.9		µg/l		20.0	94	70-130			
n-Propylbenzene	20.1		µg/l		20.0	100	70-130			
Styrene	18.9		µg/l		20.0	94	70-130			
1,1,1,2-Tetrachloroethane	21.4		µg/l		20.0	107	70-130			
1,1,2,2-Tetrachloroethane	22.1		µg/l		20.0	110	70-130			
Tetrachloroethene	22.6		µg/l		20.0	113	70-130			
Toluene	21.1		µg/l		20.0	106	70-130			
1,2,3-Trichlorobenzene	19.2		µg/l		20.0	96	70-130			
1,2,4-Trichlorobenzene	19.5		µg/l		20.0	98	70-130			
1,3,5-Trichlorobenzene	20.0		µg/l		20.0	100	70-130			
1,1,1-Trichloroethane	17.2		µg/l		20.0	86	70-130			
1,1,2-Trichloroethane	20.0		µg/l		20.0	100	70-130			
Trichloroethene	22.3		µg/l		20.0	111	70-130			
Trichlorofluoromethane (Freon 11)	21.5		µg/l		20.0	108	70-130			
1,2,3-Trichloropropane	20.2		µg/l		20.0	101	70-130			
1,2,4-Trimethylbenzene	20.0		µg/l		20.0	100	70-130			
1,3,5-Trimethylbenzene	19.6		µg/l		20.0	98	70-130			
Vinyl chloride	17.1		µg/l		20.0	85	70-130			
m,p-Xylene	40.7		µg/l		40.0	102	70-130			
o-Xylene	19.8		µg/l		20.0	99	70-130			
Tetrahydrofuran	18.5		µg/l		20.0	93	70-130			
Ethyl ether	20.2		µg/l		20.0	101	70-130			
Tert-amyl methyl ether	16.0		µg/l		20.0	80	70-130			
Ethyl tert-butyl ether	23.0		µg/l		20.0	115	70-130			
Di-isopropyl ether	18.9		µg/l		20.0	95	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331097 - SW846 5030 Water MS										
<u>LCS (1331097-BS1)</u>										
Tert-Butanol / butyl alcohol	242		µg/l		200	121		70-130		
1,4-Dioxane	258		µg/l		200	129		70-130		
trans-1,4-Dichloro-2-butene	23.0		µg/l		20.0	115		70-130		
Ethanol	566	QC2	µg/l		400	142		70-130		
<u>Surrogate: 4-Bromofluorobenzene</u>										
	51.1		µg/l		50.0	102		70-130		
<u>Surrogate: Toluene-d8</u>										
	50.6		µg/l		50.0	101		70-130		
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	43.0		µg/l		50.0	86		70-130		
<u>Surrogate: Dibromofluoromethane</u>										
	50.4		µg/l		50.0	101		70-130		
<u>LCS Dup (1331097-BSD1)</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.4		µg/l		20.0	92	70-130	19	20	
Acetone	26.3		µg/l		20.0	132	70-130	4	20	
Acrylonitrile	19.3		µg/l		20.0	96	70-130	5	20	
Benzene	17.6		µg/l		20.0	88	70-130	4	20	
Bromobenzene	21.3		µg/l		20.0	107	70-130	2	20	
Bromoform	19.8		µg/l		20.0	99	70-130	2	20	
Bromochloromethane	22.5		µg/l		20.0	112	70-130	3	20	
Bromodichloromethane	21.7		µg/l		20.0	109	70-130	3	20	
Bromoform	17.7		µg/l		20.0	88	70-130	6	20	
2-Butanone (MEK)	19.4		µg/l		20.0	97	70-130	1	20	
n-Butylbenzene	17.9		µg/l		20.0	90	70-130	15	20	
sec-Butylbenzene	18.3		µg/l		20.0	92	70-130	10	20	
tert-Butylbenzene	18.2		µg/l		20.0	91	70-130	8	20	
Carbon disulfide	18.8		µg/l		20.0	94	70-130	8	20	
Carbon tetrachloride	14.9		µg/l		20.0	75	70-130	13	20	
Chlorobenzene	19.9		µg/l		20.0	100	70-130	6	20	
Chloroethane	18.0		µg/l		20.0	90	70-130	5	20	
Chloroform	17.8		µg/l		20.0	89	70-130	3	20	
Chloromethane	19.3		µg/l		20.0	97	70-130	3	20	
2-Chlorotoluene	21.1		µg/l		20.0	105	70-130	5	20	
4-Chlorotoluene	21.3		µg/l		20.0	107	70-130	8	20	
1,2-Dibromo-3-chloropropane	19.2		µg/l		20.0	96	70-130	1	20	
Dibromochloromethane	22.4		µg/l		20.0	112	70-130	5	20	
1,2-Dibromoethane (EDB)	20.8		µg/l		20.0	104	70-130	1	20	
Dibromomethane	20.6		µg/l		20.0	103	70-130	2	20	
1,2-Dichlorobenzene	20.0		µg/l		20.0	100	70-130	6	20	
1,3-Dichlorobenzene	21.2		µg/l		20.0	106	70-130	9	20	
1,4-Dichlorobenzene	19.2		µg/l		20.0	96	70-130	8	20	
Dichlorodifluoromethane (Freon12)	20.0		µg/l		20.0	100	70-130	14	20	
1,1-Dichloroethane	19.2		µg/l		20.0	96	70-130	4	20	
1,2-Dichloroethane	17.9		µg/l		20.0	90	70-130	19	20	
1,1-Dichloroethene	19.5		µg/l		20.0	97	70-130	7	20	
cis-1,2-Dichloroethene	18.9		µg/l		20.0	94	70-130	5	20	
trans-1,2-Dichloroethene	19.6		µg/l		20.0	98	70-130	4	20	
1,2-Dichloropropane	20.6		µg/l		20.0	103	70-130	2	20	
1,3-Dichloropropane	20.2		µg/l		20.0	101	70-130	0.1	20	
2,2-Dichloropropane	26.6	QC2	µg/l		20.0	133	70-130	10	20	
1,1-Dichloropropene	15.6		µg/l		20.0	78	70-130	11	20	
cis-1,3-Dichloropropene	24.1		µg/l		20.0	121	70-130	3	20	
trans-1,3-Dichloropropene	24.3		µg/l		20.0	121	70-130	3	20	
Ethylbenzene	18.7		µg/l		20.0	94	70-130	6	20	
Hexachlorobutadiene	17.4		µg/l		20.0	87	70-130	14	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331097 - SW846 5030 Water MS										
<u>LCS Dup (1331097-BSD1)</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
2-Hexanone (MBK)	18.4		µg/l		20.0	92	70-130	7	20	
Isopropylbenzene	20.4		µg/l		20.0	102	70-130	8	20	
4-Isopropyltoluene	17.1		µg/l		20.0	85	70-130	11	20	
Methyl tert-butyl ether	21.9		µg/l		20.0	109	70-130	2	20	
4-Methyl-2-pentanone (MIBK)	19.3		µg/l		20.0	96	70-130	8	20	
Methylene chloride	17.0		µg/l		20.0	85	70-130	3	20	
Naphthalene	18.7		µg/l		20.0	94	70-130	0.9	20	
n-Propylbenzene	18.1		µg/l		20.0	90	70-130	10	20	
Styrene	18.0		µg/l		20.0	90	70-130	4	20	
1,1,1,2-Tetrachloroethane	20.7		µg/l		20.0	104	70-130	3	20	
1,1,2,2-Tetrachloroethane	22.5		µg/l		20.0	113	70-130	2	20	
Tetrachloroethene	20.1		µg/l		20.0	100	70-130	12	20	
Toluene	20.0		µg/l		20.0	100	70-130	5	20	
1,2,3-Trichlorobenzene	18.2		µg/l		20.0	91	70-130	5	20	
1,2,4-Trichlorobenzene	17.6		µg/l		20.0	88	70-130	10	20	
1,3,5-Trichlorobenzene	17.6		µg/l		20.0	88	70-130	13	20	
1,1,1-Trichloroethane	17.8		µg/l		20.0	89	70-130	4	20	
1,1,2-Trichloroethane	19.8		µg/l		20.0	99	70-130	0.8	20	
Trichloroethene	20.9		µg/l		20.0	104	70-130	7	20	
Trichlorofluoromethane (Freon 11)	19.1		µg/l		20.0	95	70-130	12	20	
1,2,3-Trichloropropane	20.9		µg/l		20.0	105	70-130	3	20	
1,2,4-Trimethylbenzene	18.6		µg/l		20.0	93	70-130	7	20	
1,3,5-Trimethylbenzene	18.2		µg/l		20.0	91	70-130	8	20	
Vinyl chloride	16.1		µg/l		20.0	81	70-130	6	20	
m,p-Xylene	38.0		µg/l		40.0	95	70-130	7	20	
o-Xylene	19.0		µg/l		20.0	95	70-130	4	20	
Tetrahydrofuran	19.7		µg/l		20.0	99	70-130	6	20	
Ethyl ether	20.2		µg/l		20.0	101	70-130	0.4	20	
Tert-amyl methyl ether	15.9		µg/l		20.0	79	70-130	0.4	20	
Ethyl tert-butyl ether	22.5		µg/l		20.0	112	70-130	2	20	
Di-isopropyl ether	18.7		µg/l		20.0	94	70-130	1	20	
Tert-Butanol / butyl alcohol	245		µg/l		200	122	70-130	1	20	
1,4-Dioxane	197	QR5	µg/l		200	99	70-130	27	20	
trans-1,4-Dichloro-2-butene	24.0		µg/l		20.0	120	70-130	5	20	
Ethanol	584	QC2	µg/l		400	146	70-130	3	20	
Surrogate: 4-Bromofluorobenzene	50.6		µg/l		50.0	101	70-130			
Surrogate: Toluene-d8	50.8		µg/l		50.0	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.6		µg/l		50.0	97	70-130			
Surrogate: Dibromofluoromethane	49.9		µg/l		50.0	100	70-130			
<u>Matrix Spike (1331097-MS1)</u>										
<u>Source: SB82369-09</u>										
<u>Prepared & Analyzed: 27-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.7	D	µg/l		20.0	BRL	123	70-130		
Acetone	29.4	QM7, D	µg/l		20.0	BRL	147	70-130		
Acrylonitrile	22.1	D	µg/l		20.0	BRL	111	70-130		
Benzene	23.2	D	µg/l		20.0	BRL	116	70-130		
Bromobenzene	20.4	D	µg/l		20.0	BRL	102	70-130		
Bromoform	24.3	D	µg/l		20.0	BRL	122	70-130		
Bromochloromethane	21.4	D	µg/l		20.0	BRL	107	70-130		
Bromodichloromethane	19.0	D	µg/l		20.0	BRL	95	70-130		
Bromomethane	23.5	D	µg/l		20.0	BRL	118	70-130		
2-Butanone (MEK)	18.8	D	µg/l		20.0	BRL	94	70-130		
n-Butylbenzene	21.7	D	µg/l		20.0	BRL	108	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1331097 - SW846 5030 Water MS													
<u>Matrix Spike (1331097-MS1)</u>													
					<u>Source: SB82369-09</u>	Prepared & Analyzed: 27-Dec-13							
sec-Butylbenzene	19.2	D	µg/l		20.0	BRL	96	70-130					
tert-Butylbenzene	18.7	D	µg/l		20.0	BRL	94	70-130					
Carbon disulfide	20.7	D	µg/l		20.0	BRL	104	70-130					
Carbon tetrachloride	20.8	D	µg/l		20.0	BRL	104	70-130					
Chlorobenzene	20.0	D	µg/l		20.0	BRL	100	70-130					
Chloroethane	24.2	D	µg/l		20.0	BRL	121	70-130					
Chloroform	20.5	D	µg/l		20.0	BRL	103	70-130					
Chloromethane	24.6	D	µg/l		20.0	BRL	123	70-130					
2-Chlorotoluene	21.9	D	µg/l		20.0	BRL	110	70-130					
4-Chlorotoluene	22.8	D	µg/l		20.0	BRL	114	70-130					
1,2-Dibromo-3-chloropropane	19.1	D	µg/l		20.0	BRL	95	70-130					
Dibromochloromethane	20.9	D	µg/l		20.0	BRL	105	70-130					
1,2-Dibromoethane (EDB)	21.2	D	µg/l		20.0	BRL	106	70-130					
Dibromomethane	20.1	D	µg/l		20.0	BRL	100	70-130					
1,2-Dichlorobenzene	21.0	D	µg/l		20.0	BRL	105	70-130					
1,3-Dichlorobenzene	21.2	D	µg/l		20.0	BRL	106	70-130					
1,4-Dichlorobenzene	20.8	D	µg/l		20.0	BRL	104	70-130					
Dichlorodifluoromethane (Freon12)	28.5	QM7, D	µg/l		20.0	BRL	142	70-130					
1,1-Dichloroethane	22.5	D	µg/l		20.0	BRL	112	70-130					
1,2-Dichloroethane	21.9	D	µg/l		20.0	BRL	110	70-130					
1,1-Dichloroethene	24.8	D	µg/l		20.0	BRL	124	70-130					
cis-1,2-Dichloroethene	30.5	D	µg/l		20.0	7.45	115	70-130					
trans-1,2-Dichloroethene	23.6	D	µg/l		20.0	BRL	118	70-130					
1,2-Dichloropropane	23.2	D	µg/l		20.0	BRL	116	70-130					
1,3-Dichloropropane	23.3	D	µg/l		20.0	BRL	117	70-130					
2,2-Dichloropropane	19.2	D	µg/l		20.0	BRL	96	70-130					
1,1-Dichloropropene	23.1	D	µg/l		20.0	BRL	116	70-130					
cis-1,3-Dichloropropene	20.8	D	µg/l		20.0	BRL	104	70-130					
trans-1,3-Dichloropropene	20.7	D	µg/l		20.0	BRL	103	70-130					
Ethylbenzene	19.8	D	µg/l		20.0	BRL	99	70-130					
Hexachlorobutadiene	18.3	D	µg/l		20.0	BRL	91	70-130					
2-Hexanone (MBK)	18.9	D	µg/l		20.0	BRL	94	70-130					
Isopropylbenzene	22.2	D	µg/l		20.0	BRL	111	70-130					
4-Isopropyltoluene	18.7	D	µg/l		20.0	BRL	93	70-130					
Methyl tert-butyl ether	20.6	D	µg/l		20.0	BRL	103	70-130					
4-Methyl-2-pentanone (MIBK)	19.6	D	µg/l		20.0	BRL	98	70-130					
Methylene chloride	21.4	D	µg/l		20.0	BRL	107	70-130					
Naphthalene	19.5	D	µg/l		20.0	BRL	98	70-130					
n-Propylbenzene	19.8	D	µg/l		20.0	BRL	99	70-130					
Styrene	17.7	D	µg/l		20.0	BRL	88	70-130					
1,1,1,2-Tetrachloroethane	18.6	D	µg/l		20.0	BRL	93	70-130					
1,1,2,2-Tetrachloroethane	24.0	D	µg/l		20.0	BRL	120	70-130					
Tetrachloroethene	23.2	D	µg/l		20.0	1.61	108	70-130					
Toluene	22.6	D	µg/l		20.0	BRL	113	70-130					
1,2,3-Trichlorobenzene	18.8	D	µg/l		20.0	BRL	94	70-130					
1,2,4-Trichlorobenzene	18.3	D	µg/l		20.0	BRL	91	70-130					
1,3,5-Trichlorobenzene	18.6	D	µg/l		20.0	BRL	93	70-130					
1,1,1-Trichloroethane	21.1	D	µg/l		20.0	BRL	105	70-130					
1,1,2-Trichloroethane	21.3	D	µg/l		20.0	BRL	106	70-130					
Trichloroethene	25.6	D	µg/l		20.0	3.67	110	70-130					
Trichlorofluoromethane (Freon 11)	24.0	D	µg/l		20.0	BRL	120	70-130					
1,2,3-Trichloropropane	22.1	D	µg/l		20.0	BRL	111	70-130					

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1331097 - SW846 5030 Water MS													
<u>Matrix Spike (1331097-MS1)</u>													
					Source: SB82369-09	Prepared & Analyzed: 27-Dec-13							
1,2,4-Trimethylbenzene	19.5	D	µg/l		20.0	BRL	97	70-130					
1,3,5-Trimethylbenzene	19.2	D	µg/l		20.0	BRL	96	70-130					
Vinyl chloride	24.6	D	µg/l		20.0	0.50	121	70-130					
m,p-Xylene	38.6	D	µg/l		40.0	BRL	96	70-130					
o-Xylene	19.4	D	µg/l		20.0	BRL	97	70-130					
Tetrahydrofuran	21.2	D	µg/l		20.0	BRL	106	70-130					
Ethyl ether	24.4	D	µg/l		20.0	BRL	122	70-130					
Tert-amyl methyl ether	20.8	D	µg/l		20.0	BRL	104	70-130					
Ethyl tert-butyl ether	19.4	D	µg/l		20.0	BRL	97	70-130					
Di-isopropyl ether	22.0	D	µg/l		20.0	BRL	110	70-130					
Tert-Butanol / butyl alcohol	212	D	µg/l		200	BRL	106	70-130					
1,4-Dioxane	250	D	µg/l		200	BRL	125	70-130					
trans-1,4-Dichloro-2-butene	17.4	D	µg/l		20.0	BRL	87	70-130					
Ethanol	555	QC2, D	µg/l		400	BRL	139	70-130					
Surrogate: 4-Bromofluorobenzene	50.2		µg/l		50.0		100	70-130					
Surrogate: Toluene-d8	52.2		µg/l		50.0		104	70-130					
Surrogate: 1,2-Dichloroethane-d4	53.0		µg/l		50.0		106	70-130					
Surrogate: Dibromofluoromethane	54.7		µg/l		50.0		109	70-130					
<u>Matrix Spike Dup (1331097-MSD1)</u>													
					Source: SB82369-09	Prepared & Analyzed: 27-Dec-13							
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.8	QR5, D	µg/l		20.0	BRL	99	70-130	22	20			
Acetone	15.7	QR5, D	µg/l		20.0	BRL	78	70-130	61	20			
Acrylonitrile	19.1	D	µg/l		20.0	BRL	96	70-130	15	20			
Benzene	19.0	D	µg/l		20.0	BRL	95	70-130	20	20			
Bromobenzene	19.8	D	µg/l		20.0	BRL	99	70-130	3	20			
Bromoform	19.6	QR5, D	µg/l		20.0	BRL	98	70-130	21	20			
Bromochloromethane	17.7	D	µg/l		20.0	BRL	89	70-130	19	20			
Bromodichloromethane	18.3	D	µg/l		20.0	BRL	91	70-130	4	20			
Bromoform	18.9	QR5, D	µg/l		20.0	BRL	94	70-130	22	20			
2-Butanone (MEK)	21.0	D	µg/l		20.0	BRL	105	70-130	11	20			
n-Butylbenzene	21.1	D	µg/l		20.0	BRL	106	70-130	3	20			
sec-Butylbenzene	18.9	D	µg/l		20.0	BRL	94	70-130	2	20			
tert-Butylbenzene	18.2	D	µg/l		20.0	BRL	91	70-130	2	20			
Carbon disulfide	16.9	QR5, D	µg/l		20.0	BRL	84	70-130	21	20			
Carbon tetrachloride	17.4	D	µg/l		20.0	BRL	87	70-130	18	20			
Chlorobenzene	19.8	D	µg/l		20.0	BRL	99	70-130	1	20			
Chloroethane	19.5	QR5, D	µg/l		20.0	BRL	97	70-130	21	20			
Chloroform	17.4	D	µg/l		20.0	BRL	87	70-130	16	20			
Chloromethane	19.7	QR5, D	µg/l		20.0	BRL	99	70-130	22	20			
2-Chlorotoluene	22.0	D	µg/l		20.0	BRL	110	70-130	0.4	20			
4-Chlorotoluene	22.7	D	µg/l		20.0	BRL	113	70-130	0.8	20			
1,2-Dibromo-3-chloropropane	19.5	D	µg/l		20.0	BRL	98	70-130	2	20			
Dibromochloromethane	17.7	D	µg/l		20.0	BRL	89	70-130	17	20			
1,2-Dibromoethane (EDB)	18.5	D	µg/l		20.0	BRL	92	70-130	14	20			
Dibromomethane	17.0	D	µg/l		20.0	BRL	85	70-130	16	20			
1,2-Dichlorobenzene	21.6	D	µg/l		20.0	BRL	108	70-130	2	20			
1,3-Dichlorobenzene	20.8	D	µg/l		20.0	BRL	104	70-130	1	20			
1,4-Dichlorobenzene	20.5	D	µg/l		20.0	BRL	103	70-130	1	20			
Dichlorodifluoromethane (Freon12)	23.6	D	µg/l		20.0	BRL	118	70-130	19	20			
1,1-Dichloroethane	18.7	D	µg/l		20.0	BRL	94	70-130	18	20			
1,2-Dichloroethane	18.9	D	µg/l		20.0	BRL	94	70-130	15	20			
1,1-Dichloroethene	19.8	QR5, D	µg/l		20.0	BRL	99	70-130	23	20			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331097 - SW846 5030 Water MS										
<u>Matrix Spike Dup (1331097-MSD1)</u>										
<u>Source: SB82369-09</u>										
Prepared & Analyzed: 27-Dec-13										
cis-1,2-Dichloroethene	25.4	QR5, D	µg/l		20.0	7.45	90	70-130	25	20
trans-1,2-Dichloroethene	18.9	QR5, D	µg/l		20.0	BRL	95	70-130	22	20
1,2-Dichloropropane	19.5	D	µg/l		20.0	BRL	97	70-130	17	20
1,3-Dichloropropane	19.4	D	µg/l		20.0	BRL	97	70-130	18	20
2,2-Dichloropropane	15.9	D	µg/l		20.0	BRL	79	70-130	19	20
1,1-Dichloropropene	19.1	D	µg/l		20.0	BRL	95	70-130	19	20
cis-1,3-Dichloropropene	17.9	D	µg/l		20.0	BRL	90	70-130	15	20
trans-1,3-Dichloropropene	17.8	D	µg/l		20.0	BRL	89	70-130	15	20
Ethylbenzene	19.2	D	µg/l		20.0	BRL	96	70-130	3	20
Hexachlorobutadiene	17.8	D	µg/l		20.0	BRL	89	70-130	3	20
2-Hexanone (MBK)	17.8	D	µg/l		20.0	BRL	89	70-130	6	20
Isopropylbenzene	21.6	D	µg/l		20.0	BRL	108	70-130	3	20
4-Isopropyltoluene	18.5	D	µg/l		20.0	BRL	93	70-130	0.9	20
Methyl tert-butyl ether	18.1	D	µg/l		20.0	BRL	91	70-130	13	20
4-Methyl-2-pentanone (MIBK)	18.0	D	µg/l		20.0	BRL	90	70-130	8	20
Methylene chloride	17.7	D	µg/l		20.0	BRL	88	70-130	19	20
Naphthalene	19.8	D	µg/l		20.0	BRL	99	70-130	1	20
n-Propylbenzene	19.4	D	µg/l		20.0	BRL	97	70-130	2	20
Styrene	17.9	D	µg/l		20.0	BRL	90	70-130	1	20
1,1,1,2-Tetrachloroethane	18.4	D	µg/l		20.0	BRL	92	70-130	0.6	20
1,1,2,2-Tetrachloroethane	24.2	D	µg/l		20.0	BRL	121	70-130	0.5	20
Tetrachloroethene	18.6	QR5, D	µg/l		20.0	1.61	85	70-130	24	20
Toluene	18.7	D	µg/l		20.0	BRL	94	70-130	19	20
1,2,3-Trichlorobenzene	18.7	D	µg/l		20.0	BRL	94	70-130	0.4	20
1,2,4-Trichlorobenzene	18.1	D	µg/l		20.0	BRL	90	70-130	1	20
1,3,5-Trichlorobenzene	18.2	D	µg/l		20.0	BRL	91	70-130	2	20
1,1,1-Trichloroethane	17.4	D	µg/l		20.0	BRL	87	70-130	19	20
1,1,2-Trichloroethane	17.8	D	µg/l		20.0	BRL	89	70-130	18	20
Trichloroethene	20.2	QR5, D	µg/l		20.0	3.67	83	70-130	28	20
Trichlorofluoromethane (Freon 11)	19.6	QR5, D	µg/l		20.0	BRL	98	70-130	21	20
1,2,3-Trichloropropane	22.5	D	µg/l		20.0	BRL	113	70-130	2	20
1,2,4-Trimethylbenzene	19.1	D	µg/l		20.0	BRL	96	70-130	2	20
1,3,5-Trimethylbenzene	18.6	D	µg/l		20.0	BRL	93	70-130	3	20
Vinyl chloride	21.6	D	µg/l		20.0	0.50	105	70-130	14	20
m,p-Xylene	38.1	D	µg/l		40.0	BRL	95	70-130	1	20
o-Xylene	19.1	D	µg/l		20.0	BRL	95	70-130	2	20
Tetrahydrofuran	19.2	D	µg/l		20.0	BRL	96	70-130	9	20
Ethyl ether	21.2	D	µg/l		20.0	BRL	106	70-130	14	20
Tert-amyl methyl ether	23.1	D	µg/l		20.0	BRL	115	70-130	10	20
Ethyl tert-butyl ether	17.0	D	µg/l		20.0	BRL	85	70-130	13	20
Di-isopropyl ether	18.6	D	µg/l		20.0	BRL	93	70-130	17	20
Tert-Butanol / butyl alcohol	198	D	µg/l		200	BRL	99	70-130	6	20
1,4-Dioxane	200	QR5, D	µg/l		200	BRL	100	70-130	22	20
trans-1,4-Dichloro-2-butene	17.0	D	µg/l		20.0	BRL	85	70-130	2	20
Ethanol	297	QR5, D	µg/l		400	BRL	74	70-130	61	20
Surrogate: 4-Bromofluorobenzene	50.8		µg/l		50.0		102	70-130		
Surrogate: Toluene-d8	43.6		µg/l		50.0		87	70-130		
Surrogate: 1,2-Dichloroethane-d4	46.0		µg/l		50.0		92	70-130		
Surrogate: Dibromofluoromethane	47.2		µg/l		50.0		94	70-130		

Batch 1331164 - SW846 5030 Water MS

Blank (1331164-BLK1)

Prepared & Analyzed: 28-Dec-13

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331164 - SW846 5030 Water MS										
<u>Blank (1331164-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331164 - SW846 5030 Water MS										
<u>Blank (1331164-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	47.7		µg/l	50.0		95		70-130		
Surrogate: Toluene-d8	50.2		µg/l	50.0		100		70-130		
Surrogate: 1,2-Dichloroethane-d4	51.3		µg/l	50.0		103		70-130		
Surrogate: Dibromofluoromethane	48.6		µg/l	50.0		97		70-130		
<u>LCS (1331164-BS1)</u>										
Prepared & Analyzed: 28-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.9		µg/l	20.0		90		70-130		
Acetone	24.4		µg/l	20.0		122		70-130		
Acrylonitrile	19.4		µg/l	20.0		97		70-130		
Benzene	19.9		µg/l	20.0		99		70-130		
Bromobenzene	20.1		µg/l	20.0		101		70-130		
Bromoform	19.3		µg/l	20.0		97		70-130		
Bromochloromethane	21.3		µg/l	20.0		107		70-130		
Bromodichloromethane	21.3		µg/l	20.0		106		70-130		
Bromoform	18.5		µg/l	20.0		93		70-130		
2-Butanone (MEK)	21.4		µg/l	20.0		107		70-130		
n-Butylbenzene	17.5		µg/l	20.0		88		70-130		
sec-Butylbenzene	18.4		µg/l	20.0		92		70-130		
tert-Butylbenzene	18.7		µg/l	20.0		94		70-130		
Carbon disulfide	17.8		µg/l	20.0		89		70-130		
Carbon tetrachloride	19.3		µg/l	20.0		97		70-130		
Chlorobenzene	19.6		µg/l	20.0		98		70-130		
Chloroethane	18.3		µg/l	20.0		92		70-130		
Chloroform	19.6		µg/l	20.0		98		70-130		
Chloromethane	17.7		µg/l	20.0		88		70-130		
2-Chlorotoluene	20.2		µg/l	20.0		101		70-130		
4-Chlorotoluene	20.7		µg/l	20.0		103		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331164 - SW846 5030 Water MS										
<u>LCS (1331164-BS1)</u>										
<u>Prepared & Analyzed: 28-Dec-13</u>										
1,2-Dibromo-3-chloropropane	19.7		µg/l		20.0	99	70-130			
Dibromochloromethane	20.1		µg/l		20.0	100	70-130			
1,2-Dibromoethane (EDB)	21.2		µg/l		20.0	106	70-130			
Dibromomethane	20.1		µg/l		20.0	100	70-130			
1,2-Dichlorobenzene	19.5		µg/l		20.0	97	70-130			
1,3-Dichlorobenzene	20.3		µg/l		20.0	102	70-130			
1,4-Dichlorobenzene	18.8		µg/l		20.0	94	70-130			
Dichlorodifluoromethane (Freon12)	19.0		µg/l		20.0	95	70-130			
1,1-Dichloroethane	19.8		µg/l		20.0	99	70-130			
1,2-Dichloroethane	19.8		µg/l		20.0	99	70-130			
1,1-Dichloroethene	19.1		µg/l		20.0	96	70-130			
cis-1,2-Dichloroethene	19.7		µg/l		20.0	98	70-130			
trans-1,2-Dichloroethene	19.5		µg/l		20.0	97	70-130			
1,2-Dichloropropane	19.2		µg/l		20.0	96	70-130			
1,3-Dichloropropane	20.0		µg/l		20.0	100	70-130			
2,2-Dichloropropane	16.4		µg/l		20.0	82	70-130			
1,1-Dichloropropene	19.9		µg/l		20.0	99	70-130			
cis-1,3-Dichloropropene	19.1		µg/l		20.0	96	70-130			
trans-1,3-Dichloropropene	19.7		µg/l		20.0	99	70-130			
Ethylbenzene	20.4		µg/l		20.0	102	70-130			
Hexachlorobutadiene	18.2		µg/l		20.0	91	70-130			
2-Hexanone (MBK)	17.4		µg/l		20.0	87	70-130			
Isopropylbenzene	20.6		µg/l		20.0	103	70-130			
4-Isopropyltoluene	20.3		µg/l		20.0	102	70-130			
Methyl tert-butyl ether	19.8		µg/l		20.0	99	70-130			
4-Methyl-2-pentanone (MIBK)	17.6		µg/l		20.0	88	70-130			
Methylene chloride	19.5		µg/l		20.0	97	70-130			
Naphthalene	19.2		µg/l		20.0	96	70-130			
n-Propylbenzene	20.6		µg/l		20.0	103	70-130			
Styrene	20.6		µg/l		20.0	103	70-130			
1,1,1,2-Tetrachloroethane	21.1		µg/l		20.0	106	70-130			
1,1,2,2-Tetrachloroethane	19.4		µg/l		20.0	97	70-130			
Tetrachloroethene	20.1		µg/l		20.0	100	70-130			
Toluene	19.8		µg/l		20.0	99	70-130			
1,2,3-Trichlorobenzene	21.3		µg/l		20.0	106	70-130			
1,2,4-Trichlorobenzene	20.4		µg/l		20.0	102	70-130			
1,3,5-Trichlorobenzene	19.1		µg/l		20.0	95	70-130			
1,1,1-Trichloroethane	20.1		µg/l		20.0	100	70-130			
1,1,2-Trichloroethane	20.1		µg/l		20.0	101	70-130			
Trichloroethene	19.7		µg/l		20.0	98	70-130			
Trichlorofluoromethane (Freon 11)	18.6		µg/l		20.0	93	70-130			
1,2,3-Trichloropropane	20.2		µg/l		20.0	101	70-130			
1,2,4-Trimethylbenzene	19.1		µg/l		20.0	96	70-130			
1,3,5-Trimethylbenzene	18.6		µg/l		20.0	93	70-130			
Vinyl chloride	17.2		µg/l		20.0	86	70-130			
m,p-Xylene	42.0		µg/l		40.0	105	70-130			
o-Xylene	21.6		µg/l		20.0	108	70-130			
Tetrahydrofuran	19.3		µg/l		20.0	96	70-130			
Ethyl ether	19.1		µg/l		20.0	96	70-130			
Tert-amyl methyl ether	18.2		µg/l		20.0	91	70-130			
Ethyl tert-butyl ether	19.9		µg/l		20.0	100	70-130			
Di-isopropyl ether	19.8		µg/l		20.0	99	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331164 - SW846 5030 Water MS										
<u>LCS (1331164-BS1)</u>										
Tert-Butanol / butyl alcohol	191		µg/l		200	95		70-130		
1,4-Dioxane	193		µg/l		200	97		70-130		
trans-1,4-Dichloro-2-butene	18.0		µg/l		20.0	90		70-130		
Ethanol	353		µg/l		400	88		70-130		
<u>Surrogate: 4-Bromofluorobenzene</u>										
	50.7		µg/l		50.0	101		70-130		
<u>Surrogate: Toluene-d8</u>										
	49.8		µg/l		50.0	100		70-130		
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	49.4		µg/l		50.0	99		70-130		
<u>Surrogate: Dibromofluoromethane</u>										
	50.6		µg/l		50.0	101		70-130		
<u>LCS Dup (1331164-BSD1)</u>										
<u>Prepared & Analyzed: 28-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.7		µg/l		20.0	94	70-130	4	20	
Acetone	25.7		µg/l		20.0	128	70-130	5	20	
Acrylonitrile	19.3		µg/l		20.0	96	70-130	0.5	20	
Benzene	20.5		µg/l		20.0	102	70-130	3	20	
Bromobenzene	20.3		µg/l		20.0	102	70-130	0.9	20	
Bromoform	19.3		µg/l		20.0	96	70-130	0.3	20	
Bromochloromethane	21.3		µg/l		20.0	107	70-130	0.09	20	
Bromodichloromethane	21.1		µg/l		20.0	106	70-130	0.8	20	
Bromoform	19.0		µg/l		20.0	95	70-130	3	20	
2-Butanone (MEK)	21.4		µg/l		20.0	107	70-130	0	20	
n-Butylbenzene	18.5		µg/l		20.0	93	70-130	5	20	
sec-Butylbenzene	19.3		µg/l		20.0	97	70-130	5	20	
tert-Butylbenzene	19.0		µg/l		20.0	95	70-130	2	20	
Carbon disulfide	19.0		µg/l		20.0	95	70-130	7	20	
Carbon tetrachloride	19.8		µg/l		20.0	99	70-130	2	20	
Chlorobenzene	20.1		µg/l		20.0	100	70-130	2	20	
Chloroethane	19.1		µg/l		20.0	96	70-130	4	20	
Chloroform	20.1		µg/l		20.0	100	70-130	2	20	
Chloromethane	18.3		µg/l		20.0	92	70-130	3	20	
2-Chlorotoluene	21.0		µg/l		20.0	105	70-130	4	20	
4-Chlorotoluene	21.2		µg/l		20.0	106	70-130	2	20	
1,2-Dibromo-3-chloropropane	20.0		µg/l		20.0	100	70-130	2	20	
Dibromochloromethane	20.7		µg/l		20.0	103	70-130	3	20	
1,2-Dibromoethane (EDB)	20.9		µg/l		20.0	104	70-130	1	20	
Dibromomethane	20.1		µg/l		20.0	101	70-130	0.3	20	
1,2-Dichlorobenzene	20.3		µg/l		20.0	101	70-130	4	20	
1,3-Dichlorobenzene	19.6		µg/l		20.0	98	70-130	4	20	
1,4-Dichlorobenzene	20.4		µg/l		20.0	102	70-130	8	20	
Dichlorodifluoromethane (Freon12)	19.6		µg/l		20.0	98	70-130	3	20	
1,1-Dichloroethane	20.2		µg/l		20.0	101	70-130	2	20	
1,2-Dichloroethane	20.2		µg/l		20.0	101	70-130	2	20	
1,1-Dichloroethene	20.5		µg/l		20.0	103	70-130	7	20	
cis-1,2-Dichloroethene	20.6		µg/l		20.0	103	70-130	4	20	
trans-1,2-Dichloroethene	20.2		µg/l		20.0	101	70-130	4	20	
1,2-Dichloropropane	19.8		µg/l		20.0	99	70-130	3	20	
1,3-Dichloropropane	19.8		µg/l		20.0	99	70-130	0.9	20	
2,2-Dichloropropane	17.9		µg/l		20.0	90	70-130	9	20	
1,1-Dichloropropene	20.8		µg/l		20.0	104	70-130	5	20	
cis-1,3-Dichloropropene	19.6		µg/l		20.0	98	70-130	3	20	
trans-1,3-Dichloropropene	20.1		µg/l		20.0	100	70-130	2	20	
Ethylbenzene	21.2		µg/l		20.0	106	70-130	4	20	
Hexachlorobutadiene	19.8		µg/l		20.0	99	70-130	8	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331164 - SW846 5030 Water MS										
<u>LCS Dup (1331164-BSD1)</u>										
<u>Prepared & Analyzed: 28-Dec-13</u>										
2-Hexanone (MBK)	17.8		µg/l		20.0	89	70-130	2	20	
Isopropylbenzene	21.4		µg/l		20.0	107	70-130	4	20	
4-Isopropyltoluene	21.0		µg/l		20.0	105	70-130	4	20	
Methyl tert-butyl ether	20.0		µg/l		20.0	100	70-130	1	20	
4-Methyl-2-pentanone (MIBK)	18.8		µg/l		20.0	94	70-130	6	20	
Methylene chloride	20.0		µg/l		20.0	100	70-130	2	20	
Naphthalene	19.8		µg/l		20.0	99	70-130	3	20	
n-Propylbenzene	21.5		µg/l		20.0	108	70-130	4	20	
Styrene	21.2		µg/l		20.0	106	70-130	3	20	
1,1,1,2-Tetrachloroethane	21.8		µg/l		20.0	109	70-130	3	20	
1,1,2,2-Tetrachloroethane	18.9		µg/l		20.0	94	70-130	3	20	
Tetrachloroethene	21.2		µg/l		20.0	106	70-130	6	20	
Toluene	20.4		µg/l		20.0	102	70-130	3	20	
1,2,3-Trichlorobenzene	22.0		µg/l		20.0	110	70-130	3	20	
1,2,4-Trichlorobenzene	21.2		µg/l		20.0	106	70-130	4	20	
1,3,5-Trichlorobenzene	19.9		µg/l		20.0	100	70-130	4	20	
1,1,1-Trichloroethane	21.4		µg/l		20.0	107	70-130	7	20	
1,1,2-Trichloroethane	20.4		µg/l		20.0	102	70-130	1	20	
Trichloroethene	20.0		µg/l		20.0	100	70-130	2	20	
Trichlorofluoromethane (Freon 11)	19.2		µg/l		20.0	96	70-130	3	20	
1,2,3-Trichloropropane	20.0		µg/l		20.0	100	70-130	0.9	20	
1,2,4-Trimethylbenzene	19.6		µg/l		20.0	98	70-130	3	20	
1,3,5-Trimethylbenzene	19.8		µg/l		20.0	99	70-130	6	20	
Vinyl chloride	18.6		µg/l		20.0	93	70-130	8	20	
m,p-Xylene	43.4		µg/l		40.0	108	70-130	3	20	
o-Xylene	21.7		µg/l		20.0	108	70-130	0.05	20	
Tetrahydrofuran	19.3		µg/l		20.0	97	70-130	0.2	20	
Ethyl ether	19.1		µg/l		20.0	95	70-130	0.2	20	
Tert-amyl methyl ether	18.2		µg/l		20.0	91	70-130	0.2	20	
Ethyl tert-butyl ether	20.4		µg/l		20.0	102	70-130	2	20	
Di-isopropyl ether	19.6		µg/l		20.0	98	70-130	1	20	
Tert-Butanol / butyl alcohol	184		µg/l		200	92	70-130	4	20	
1,4-Dioxane	185		µg/l		200	93	70-130	4	20	
trans-1,4-Dichloro-2-butene	17.3		µg/l		20.0	87	70-130	4	20	
Ethanol	348		µg/l		400	87	70-130	1	20	
Surrogate: 4-Bromofluorobenzene	51.0		µg/l		50.0	102	70-130			
Surrogate: Toluene-d8	50.0		µg/l		50.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	49.6		µg/l		50.0	99	70-130			
Surrogate: Dibromofluoromethane	51.0		µg/l		50.0	102	70-130			

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331196 - SW846 3005A										
<u>Blank (1331196-BLK1)</u>										
Sodium	< 5.00		mg/l	5.00				Prepared & Analyzed: 30-Dec-13		
Iron	< 0.0150		mg/l	0.0150						
Manganese	< 0.0020		mg/l	0.0020						
Lead	< 0.0075		mg/l	0.0075						
Nickel	< 0.0050		mg/l	0.0050						
Chromium	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Barium	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
Copper	< 0.0050		mg/l	0.0050						
Zinc	< 0.0050		mg/l	0.0050						
<u>LCS (1331196-BS1)</u>										
Sodium	5.88		mg/l	5.00	6.25		94	Prepared & Analyzed: 30-Dec-13		
Iron	1.30		mg/l	0.0150	1.25		104	85-115		
Manganese	1.26		mg/l	0.0020	1.25		101	85-115		
Chromium	1.21		mg/l	0.0050	1.25		97	85-115		
Arsenic	1.27		mg/l	0.0040	1.25		101	85-115		
Nickel	1.17		mg/l	0.0050	1.25		94	85-115		
Lead	1.15		mg/l	0.0075	1.25		92	85-115		
Cadmium	1.28		mg/l	0.0025	1.25		103	85-115		
Barium	1.21		mg/l	0.0050	1.25		97	85-115		
Zinc	1.15		mg/l	0.0050	1.25		92	85-115		
Copper	1.22		mg/l	0.0050	1.25		97	85-115		
<u>LCS Dup (1331196-BSD1)</u>										
Manganese	1.31		mg/l	0.0020	1.25		105	85-115	4	20
Sodium	5.72		mg/l	5.00	6.25		91	85-115	3	20
Iron	1.32		mg/l	0.0150	1.25		106	85-115	2	20
Nickel	1.17		mg/l	0.0050	1.25		94	85-115	0.1	20
Cadmium	1.27		mg/l	0.0025	1.25		101	85-115	1	20
Copper	1.21		mg/l	0.0050	1.25		97	85-115	0.3	20
Barium	1.18		mg/l	0.0050	1.25		95	85-115	2	20
Arsenic	1.25		mg/l	0.0040	1.25		100	85-115	1	20
Lead	1.15		mg/l	0.0075	1.25		92	85-115	0.2	20
Zinc	1.15		mg/l	0.0050	1.25		92	85-115	0.04	20
Chromium	1.19		mg/l	0.0050	1.25		95	85-115	2	20
<u>Duplicate (1331196-DUP1)</u>										
Iron	0.121		mg/l	0.0150		0.121			0.3	20
Sodium	141	R06	mg/l	5.00		138			2	20
Manganese	0.0576		mg/l	0.0020		0.0535			7	20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Zinc	0.0146		mg/l	0.0050		0.0138			5	20
Lead	< 0.0075		mg/l	0.0075		BRL				20
Nickel	0.0134		mg/l	0.0050		0.0129			3	20
Chromium	0.0012	J	mg/l	0.0050		0.0012			4	20
Barium	0.0792		mg/l	0.0050		0.0756			5	20
Arsenic	0.0124		mg/l	0.0040		0.0106			16	20
Copper	0.0158		mg/l	0.0050		0.0148			7	20
<u>Matrix Spike (1331196-MS1)</u>										
Sodium	146	QM2	mg/l	5.00	6.25	138	126	75-125		
Iron	1.39		mg/l	0.0150	1.25	0.121	101	75-125		
Manganese	1.28		mg/l	0.0020	1.25	0.0535	98	75-125		

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
Batch 1331196 - SW846 3005A											
<u>Matrix Spike (1331196-MS1)</u>					<u>Source: SB82369-04</u>	Prepared: 30-Dec-13 Analyzed: 31-Dec-13					
Zinc	1.12		mg/l	0.0050	1.25	0.0138	88	75-125			
Barium	1.28		mg/l	0.0050	1.25	0.0756	96	75-125			
Cadmium	1.25		mg/l	0.0025	1.25	BRL	100	75-125			
Chromium	1.19		mg/l	0.0050	1.25	0.0012	95	75-125			
Copper	1.21		mg/l	0.0050	1.25	0.0148	96	75-125			
Lead	1.10		mg/l	0.0075	1.25	BRL	88	75-125			
Nickel	1.13		mg/l	0.0050	1.25	0.0129	89	75-125			
Arsenic	1.33		mg/l	0.0040	1.25	0.0106	105	75-125			
<u>Matrix Spike Dup (1331196-MSD1)</u>					<u>Source: SB82369-04</u>	Prepared: 30-Dec-13 Analyzed: 31-Dec-13					
Manganese	1.27		mg/l	0.0020	1.25	0.0535	97	75-125	0.9	20	
Iron	1.34		mg/l	0.0150	1.25	0.121	98	75-125	3	20	
Sodium	141	QM2	mg/l	5.00	6.25	138	52	75-125	3	20	
Cadmium	1.21		mg/l	0.0025	1.25	BRL	97	75-125	3	20	
Zinc	1.10		mg/l	0.0050	1.25	0.0138	87	75-125	1	20	
Lead	1.09		mg/l	0.0075	1.25	BRL	87	75-125	1	20	
Nickel	1.11		mg/l	0.0050	1.25	0.0129	88	75-125	1	20	
Chromium	1.14		mg/l	0.0050	1.25	0.0012	91	75-125	4	20	
Barium	1.23		mg/l	0.0050	1.25	0.0756	93	75-125	4	20	
Arsenic	1.29		mg/l	0.0040	1.25	0.0106	102	75-125	3	20	
Copper	1.19		mg/l	0.0050	1.25	0.0148	94	75-125	1	20	
<u>Post Spike (1331196-PS1)</u>					<u>Source: SB82369-04</u>	Prepared: 30-Dec-13 Analyzed: 31-Dec-13					
Sodium	143		mg/l	5.00	6.25	138	86	80-120			
Iron	1.44		mg/l	0.0150	1.25	0.121	105	80-120			
Manganese	1.37		mg/l	0.0020	1.25	0.0535	105	80-120			
Copper	1.25		mg/l	0.0050	1.25	0.0148	99	80-120			
Cadmium	1.26		mg/l	0.0025	1.25	BRL	101	80-120			
Nickel	1.15		mg/l	0.0050	1.25	0.0129	91	80-120			
Lead	1.12		mg/l	0.0075	1.25	BRL	90	80-120			
Zinc	1.14		mg/l	0.0050	1.25	0.0138	90	80-120			
Barium	1.30		mg/l	0.0050	1.25	0.0756	98	80-120			
Arsenic	1.36		mg/l	0.0040	1.25	0.0106	108	80-120			
Chromium	1.21		mg/l	0.0050	1.25	0.0012	96	80-120			

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330725 - General Preparation										
<u>Blank (1330725-BLK1)</u>										
Nitrite as N	< 0.100		mg/l	0.100				Prepared & Analyzed: 20-Dec-13		
Sulfate as SO4	< 1.00		mg/l	1.00						
Chloride	< 1.00		mg/l	1.00						
Nitrate as N	< 0.100		mg/l	0.100						
<u>LCS (1330725-BS1)</u>										
Chloride	20.5		mg/l	1.00	20.0	102	90-110			
Sulfate as SO4	19.6		mg/l	1.00	20.0	98	90-110			
Nitrite as N	2.07		mg/l	0.100	2.00	104	90-110			
Nitrate as N	2.03		mg/l	0.100	2.00	101	90-110			
<u>Duplicate (1330725-DUP1)</u>										
Chloride	76.9	D	mg/l	3.00		76.6			0.4	20
Nitrite as N	< 0.100		mg/l	0.100		BRL				
Sulfate as SO4	64.8	D	mg/l	3.00		65.5			1	20
Nitrate as N	2.98		mg/l	0.100		3.00			0.9	20
<u>Matrix Spike (1330725-MS1)</u>										
Sulfate as SO4	65.1	QM7	mg/l	1.00	4.00	65.5	-11	90-110		
Nitrite as N	0.351	QM7	mg/l	0.100	0.400	BRL	88	90-110		
Chloride	78.4	QM7	mg/l	1.00	4.00	76.6	44	90-110		
Nitrate as N	3.42		mg/l	0.100	0.400	3.00	102	90-110		
<u>Matrix Spike Dup (1330725-MSD1)</u>										
Sulfate as SO4	65.0	QM7	mg/l	1.00	4.00	65.5	-12	90-110	0.09	20
Nitrite as N	0.350	QM7	mg/l	0.100	0.400	BRL	88	90-110	0.3	20
Chloride	78.3	QM7	mg/l	1.00	4.00	76.6	41	90-110	0.2	20
Nitrate as N	3.41		mg/l	0.100	0.400	3.00	101	90-110	0.2	20
<u>Reference (1330725-SRM1)</u>										
Sulfate as SO4	26.2		mg/l	1.00	25.0	105	90-110			
Nitrite as N	2.78	QM9	mg/l	0.100	2.50	111	90-110			
Chloride	26.7		mg/l	1.00	25.0	107	90-110			
Nitrate as N	2.78	QM9	mg/l	0.100	2.50	111	90-110			
Batch 1330740 - General Preparation										
<u>Blank (1330740-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0				Prepared: 21-Dec-13 Analyzed: 23-Dec-13		
<u>LCS (1330740-BS1)</u>										
Total Suspended Solids	106		mg/l	10.0	100	106	90-110			
Batch 1330755 - General Preparation										
<u>Blank (1330755-BLK1)</u>										
Total Dissolved Solids	< 5		mg/l	5				Prepared: 23-Dec-13 Analyzed: 26-Dec-13		
<u>LCS (1330755-BS1)</u>										
Total Dissolved Solids	948		mg/l	10	1000	95	90-110			
Batch 1330892 - General Preparation										
<u>Blank (1330892-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0				Prepared: 24-Dec-13 Analyzed: 26-Dec-13		
<u>LCS (1330892-BS1)</u>										
Total Suspended Solids	98.0		mg/l	10.0	100	98	90-110			
<u>Duplicate (1330892-DUP1)</u>										
Total Suspended Solids	2.0	J	mg/l	5.0		2.0			0	20
<u>Duplicate (1330892-DUP2)</u>										
Total Suspended Solids	2.0	J	mg/l	5.0		2.0			0	20
Batch 1330899 - General Preparation										
<u>Blank (1330899-BLK1)</u>										
								Prepared: 24-Dec-13 Analyzed: 27-Dec-13		

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330899 - General Preparation										
<u>Blank (1330899-BLK1)</u>										
Ammonia as N	< 0.100		mg/l	0.100						
<u>LCS (1330899-BS1)</u>										
Ammonia as N	2.56		mg/l	0.100	2.50	102	90-110			
<u>Reference (1330899-SRM1)</u>										
Ammonia as N	1.15		mg/l	0.100	1.04	111	84-116			
Batch 1331033 - General Preparation										
<u>Blank (1331033-BLK1)</u>										
Total Organic Carbon	< 1.00		mg/l	1.00						
<u>LCS (1331033-BS1)</u>										
Total Organic Carbon	16.0		mg/l	1.00	15.0	106	85-115			
<u>Calibration Blank (1331033-CCB1)</u>										
Total Organic Carbon	0.273		mg/l							
<u>Calibration Blank (1331033-CCB2)</u>										
Total Organic Carbon	0.292		mg/l							
<u>Calibration Blank (1331033-CCB3)</u>										
Total Organic Carbon	0.327		mg/l							
<u>Calibration Blank (1331033-CCB4)</u>										
Total Organic Carbon	0.330		mg/l							
<u>Calibration Blank (1331033-CCB5)</u>										
Total Organic Carbon	0.299		mg/l							
<u>Calibration Check (1331033-CCV1)</u>										
Total Organic Carbon	4.84		mg/l	1.00	5.00	97	85-115			
<u>Calibration Check (1331033-CCV2)</u>										
Total Organic Carbon	5.11		mg/l	1.00	5.00	102	85-115			
<u>Calibration Check (1331033-CCV3)</u>										
Total Organic Carbon	4.81		mg/l	1.00	5.00	96	85-115			
<u>Calibration Check (1331033-CCV4)</u>										
Total Organic Carbon	4.95		mg/l	1.00	5.00	99	85-115			
<u>Calibration Check (1331033-CCV5)</u>										
Total Organic Carbon	4.96		mg/l	1.00	5.00	99	85-115			
<u>Matrix Spike (1331033-MS2)</u>										
Total Organic Carbon	5.73		mg/l	1.00	5.00	0.972	95	70-130		
<u>Reference (1331033-SRM1)</u>										
Total Organic Carbon	8.19		mg/l	1.00	8.20	100	87-113			
Batch 1331076 - General Preparation										
<u>Blank (1331076-BLK1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>Blank (1331076-BLK2)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500						
<u>LCS (1331076-BS1)</u>										
Cyanide (total)	0.306		mg/l	0.00500	0.300	102	90-110			
<u>LCS (1331076-BS2)</u>										
Cyanide (total)	0.312		mg/l	0.00500	0.300	104	90-110			
<u>Duplicate (1331076-DUP1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500		BRL				20
<u>Matrix Spike (1331076-MS1)</u>										
Cyanide (total)	0.297		mg/l	0.00500	0.300	BRL	99	90-110		
<u>Matrix Spike Dup (1331076-MSD1)</u>										
Cyanide (total)	0.286		mg/l	0.00500	0.300	BRL	95	90-110	4	20

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	
Batch 1331076 - General Preparation											
<u>Reference (1331076-SRM1)</u>											
Cyanide (total)	0.156		mg/l	0.00500	0.168		93	74.9-125			
<u>Prepared & Analyzed: 27-Dec-13</u>											
Batch 1331153 - General Preparation											
<u>Blank (1331153-BLK1)</u>											
Cyanide (total)	< 0.00500		mg/l	0.00500			<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>				
<u>Blank (1331153-BLK2)</u>											
Cyanide (total)	< 0.00500		mg/l	0.00500			<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>				
<u>LCS (1331153-BS1)</u>											
Cyanide (total)	0.316		mg/l	0.00500	0.300		105	90-110			
<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>											
<u>LCS (1331153-BS2)</u>											
Cyanide (total)	0.303		mg/l	0.00500	0.300		101	90-110			
<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>											
<u>Duplicate (1331153-DUP1)</u>											
Cyanide (total)	< 0.00500		mg/l	0.00500			<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>				
<u>Source: SB82369-10</u>											
Cyanide (total)							BRL			20	
<u>Matrix Spike (1331153-MS1)</u>											
Cyanide (total)	0.311		mg/l	0.00500	0.300	BRL	104	90-110			
<u>Source: SB82369-10</u>											
Cyanide (total)							<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>				
<u>Matrix Spike Dup (1331153-MSD1)</u>											
Cyanide (total)	0.319		mg/l	0.00500	0.300	BRL	106	90-110	3	20	
<u>Source: SB82369-10</u>											
Cyanide (total)							<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>				
<u>Reference (1331153-SRM1)</u>											
Cyanide (total)	0.173		mg/l	0.00500	0.168		103	74.9-125			
<u>Prepared: 27-Dec-13 Analyzed: 30-Dec-13</u>											
Batch 1331217 - General Preparation											
<u>Blank (1331217-BLK1)</u>											
Total Organic Carbon	< 1.00		mg/l	1.00			<u>Prepared & Analyzed: 27-Dec-13</u>				
<u>LCS (1331217-BS1)</u>											
Total Organic Carbon	16.5		mg/l	1.00	15.0		110	85-115			
<u>Prepared & Analyzed: 27-Dec-13</u>											
<u>Calibration Blank (1331217-CCB1)</u>											
Total Organic Carbon	0.365		mg/l				<u>Prepared & Analyzed: 27-Dec-13</u>				
<u>Calibration Blank (1331217-CCB2)</u>											
Total Organic Carbon	0.353		mg/l				<u>Prepared & Analyzed: 27-Dec-13</u>				
<u>Calibration Blank (1331217-CCB3)</u>											
Total Organic Carbon	0.694		mg/l				<u>Prepared & Analyzed: 27-Dec-13</u>				
<u>Calibration Check (1331217-CCV1)</u>											
Total Organic Carbon	5.10		mg/l	1.00	5.00		102	85-115			
<u>Prepared & Analyzed: 27-Dec-13</u>											
<u>Calibration Check (1331217-CCV2)</u>											
Total Organic Carbon	4.74		mg/l	1.00	5.00		95	85-115			
<u>Prepared & Analyzed: 27-Dec-13</u>											
<u>Calibration Check (1331217-CCV3)</u>											
Total Organic Carbon	5.72		mg/l	1.00	5.00		114	85-115			
<u>Prepared & Analyzed: 27-Dec-13</u>											
<u>Duplicate (1331217-DUP2)</u>											
Total Organic Carbon	1.59		mg/l	1.00			1.76		10	20	
<u>Source: SB82369-08</u>											
<u>Matrix Spike (1331217-MS2)</u>											
Total Organic Carbon	8.19		mg/l	1.00	5.00	2.96	105	70-130			
<u>Prepared & Analyzed: 27-Dec-13</u>											
<u>Reference (1331217-SRM1)</u>											
Total Organic Carbon	8.19		mg/l	1.00	8.20		100	87-113			

This laboratory report is not valid without an authorized signature on the cover page.

Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 263250A - 263250										
<u>BLK (BF92186-BLK)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	< 0.015		mg/L	0.015					-	
<u>DUP (BF92186-DUP)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	ND		mg/L				0.019	-	0	20
<u>LCS (BF92186-LCS)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	ND		mg/L				107	70-130		20
<u>MS (BF92186-MS)</u>					<u>Source: BF92186</u>			<u>Prepared & Analyzed: 27-Dec-13</u>		
Phenolics	ND		mg/L				96.0	70-130		20
Batch 263339A - 263339										
<u>BLK (BF91813-BLK)</u>					<u>Source: SB82369-05</u>			<u>Prepared & Analyzed: 30-Dec-13</u>		
Phenolics	< 0.015		mg/L	0.015					-	
<u>DUP (BF91813-DUP)</u>					<u>Source: SB82369-05</u>			<u>Prepared & Analyzed: 30-Dec-13</u>		
Phenolics	ND		mg/L				BRL	-	0	20
<u>LCS (BF91813-LCS)</u>					<u>Source: SB82369-05</u>			<u>Prepared & Analyzed: 30-Dec-13</u>		
Phenolics	ND		mg/L				100	70-130		20
<u>MS (BF91813-MS)</u>					<u>Source: SB82369-05</u>			<u>Prepared & Analyzed: 30-Dec-13</u>		
Phenolics	ND		mg/L				93.5	70-130		20

This laboratory report is not valid without an authorized signature on the cover page.

Notes and Definitions

D	Data reported from a dilution
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QCR	Sample data reported for QC purposes only.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR5	RPD out of acceptance range.
R06	IMRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
June O'Connor



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

SB 82369 By /

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Page 1 of 1

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford, MA

Invoice To: Kris Sibinga
Envirite Corporation
PO Box 591
Chappaqua, NY 10514

Telephone #: 603-703-5534
Project Mgr. John Noble

Project No.: 03-14218 G2

Site Name: Envirite RCRA Landfill

Location: Thomaston State: CT

Sampler(s): Luke C / John V

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= 12=

List preservative code below:

2 10 5 4 3

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=Trip Blank X2= X3=

QA/QC Reporting Notes:
* additional charges may apply

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:			Analyses:			MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input type="checkbox"/>	CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
						# of VOA Vials	# of Amber Glass	# of Clear Glass	Total Cyanide	Ammonia as N	Phenolics		
82369-1	MW-61D/20131219	12-19-13	1600	G	GW	5	1	5	X X X X X	X X X X X	X X X X X		
02	MW-33/20131219	12-19-13	1600			5	1	5	X X X X X	X X X X X	X X X X X		
03	DUP-20131220	12-20-13	NA			5	1	5	X X X X X	X X X X X	X X X X X		
04	MW-43S/20131220		1145			5	1	5	X X X X X	X X X X X	X X X X X		
05	MW-43D/20131220		1315			5	1	5	X X X X X	X X X X X	X X X X X		
06	MW-31D/20131220		1450		GW	5	1	5	X X X X X	X X X X X	X X X X X		
07	TB-20131220		0800		X1	1							
08	MW-44S/20131220		0905		GW	5	1	5	X X X X X	X X X X X	X X X X X		
09	MW-44D/20131220		1045		GW	5	1	5	X X X X X	X X X X X	Y X X		
10	MW-44B/20131220	12-20-13	1415	G	GW	5	1	5	X X X X X	X Y X X Y	X Y X X Y		

QA/QC Reporting Level

- Standard No QC DQA*
- NY ASP A* NY ASP B*
- NJ Reduced* NJ Full*
- TIER II* TIER IV*

Other CT RCP CTRSRs

State-specific reporting standards:

18/1/08 IR 02

JH 12/20

Relinquished by:

Received by:

Date:

Time:

Temp °C

12-20-13

3:20

12/20/13

175

EDD Format Environ Equis 4-File

E-mail to jnoble@environecorp.com

Condition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

Report Date:
07-Jan-14 15:41

- Final Report
 Re-Issued Report
 Revised Report



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Laboratory Report

ENVIRON International Corporation
3 Carlisle Rd
Westford, MA 01886
Attn: John Noble

Project: Envirite RCRA Landfill - Thomaston, CT
Project #: 08-14218G2

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB82439-01	TB-20131223	Trip Blank	23-Dec-13 08:00	23-Dec-13 16:45
SB82439-02	EB-20131223	Equipment Blank	23-Dec-13 13:00	23-Dec-13 16:45
SB82439-03	MW-36/20131223	Ground Water	23-Dec-13 09:45	23-Dec-13 16:45
SB82439-04	MW-37D/20131223	Ground Water	23-Dec-13 10:50	23-Dec-13 16:45
SB82439-05	MW-37B/20131223	Ground Water	23-Dec-13 12:30	23-Dec-13 16:45
SB82439-06	MW-31S/20131223	Ground Water	23-Dec-13 14:00	23-Dec-13 16:45
SB82439-07	MW-31B/20131223	Ground Water	23-Dec-13 09:40	23-Dec-13 16:45
SB82439-08	DUP-20131223	Ground Water	23-Dec-13 00:00	23-Dec-13 16:45

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director



Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 67 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Project Location: Envirite RCRA Landfill - Thomaston, CT

Sampling Date(s):

12/23/2013

RCP Methods Used:

EPA 335.4 / SW846 9012B

SW846 6010C

SW846 8260C

Client: ENVIRON International Corporation - Westford, MA

Project Number: 08-14218G2

Laboratory Sample ID(s):

SB82439-01 through SB82439-08

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes	No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes	No
1B	<i>VPH and EPH methods only:</i> Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes	No
3	Were samples received at an appropriate temperature?	<input checked="" type="checkbox"/> Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	<input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes Yes	<input checked="" type="checkbox"/> No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes	<input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja
Laboratory Director
Date: 1/7/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received 3.4 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

According to CTDEP RCP Quality Assurance and Quality Control Requirements for VOCs by method 8260, SW-846 version 1, 7/28/05 Table 1A, recovery for some VOC analytes have been deemed potentially difficult.

For this work order, the reporting limits have not been referenced or specified.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 300.0

Spikes:

1330853-MS2 *Source: SB82439-07*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Chloride
Nitrate as N
Sulfate as SO₄

1330853-MSD2 *Source: SB82439-07*

The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.

Chloride
Nitrate as N
Sulfate as SO₄

Samples:

SB82439-03 *MW-36/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

EPA 300.0

Samples:

SB82439-04 *MW-37D/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SB82439-05 *MW-37B/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SB82439-06 *MW-31S/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

SB82439-07 *MW-31B/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

Nitrate as N

Sulfate as SO₄

SB82439-08 *DUP-20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Chloride

EPA 335.4 / SW846 9012B

Spikes:

1400190-MS1 *Source: SB82439-08*

The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.

Cyanide (total)

EPA 350.1

Samples:

SB82439-06 *MW-31S/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Ammonia as N

SB82439-08 *DUP-20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Ammonia as N

SM 5310B

Samples:

SB82439-06 *MW-31S/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Total Organic Carbon

SB82439-08 *DUP-20131223*

SM 5310B

Samples:

SB82439-08 DUP-20131223

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Total Organic Carbon

SW846 6010C

Duplicates:

1331280-DUP1 Source: SB82439-02

Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.

Copper

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

Samples:

SB82439-02 EB-20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SB82439-03 MW-36/20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SB82439-04 MW-37D/20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SB82439-05 MW-37B/20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SB82439-06 MW-31S/20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SB82439-07 MW-31B/20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SB82439-08 DUP-20131223

SW846 6010C

Samples:

SB82439-08 DUP-20131223

IMRL raised to correlate to batch QC reporting limits.

Manganese

Sodium

SW846 8260C

Calibration:

1312068

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene

1,2,4-Trichlorobenzene

1,2-Dibromo-3-chloropropane

1,3,5-Trichlorobenzene

2-Hexanone (MBK)

Acetone

Bromoform

cis-1,3-Dichloropropene

Dibromochloromethane

Hexachlorobutadiene

Naphthalene

n-Butylbenzene

trans-1,3-Dichloropropene

This affected the following samples:

1400027-BLK1

1400027-BS1

1400027-BSD1

DUP-20131223

S315401-ICV1

S400003-CCV1

1312086

Analyte quantified by quadratic equation type calibration.

1,1,1,2-Tetrachloroethane

1,1,1-Trichloroethane

1,1,2-Trichloroethane

1,2-Dibromo-3-chloropropane

1,2-Dibromoethane (EDB)

1,2-Dichloroethane

2-Hexanone (MBK)

4-Methyl-2-pentanone (MIBK)

Acetone

Bromodichloromethane

Bromoform

Carbon disulfide

Carbon tetrachloride

cis-1,3-Dichloropropene

Dibromochloromethane

Dibromomethane

Ethanol

Tert-Butanol / butyl alcohol

trans-1,3-Dichloropropene

trans-1,4-Dichloro-2-butene

SW846 8260C

Calibration:

1312086

This affected the following samples:

1331210-BLK1
1331210-BS1
1331210-BSD1
MW-31B/20131223
MW-31S/20131223
MW-36/20131223
S315629-ICV1
S315803-CCV1

1312089

Analyte quantified by quadratic equation type calibration.

1,1,2-Trichlorotrifluoroethane (Freon 113)
1,2,3-Trichlorobenzene
1,2,4-Trimethylbenzene
1,3,5-Trichlorobenzene
1,3,5-Trimethylbenzene
Naphthalene
n-Butylbenzene
n-Propylbenzene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Vinyl chloride

This affected the following samples:

1330974-BLK1
1330974-BS1
1330974-BSD1
1330974-MS1
1330974-MSD1
DUP-20131223
EB-20131223
MW-31S/20131223
MW-36/20131223
MW-37B/20131223
MW-37D/20131223
S315684-CCV1
S315715-ICV1
TB-20131223

S315715-ICV1

Analyte percent recovery is outside individual acceptance criteria.

2,2-Dichloropropane (78%)

SW846 8260C

Calibration:

S315715-ICV1

This affected the following samples:

1330974-BLK1
1330974-BS1
1330974-BSD1
1330974-MS1
1330974-MSD1
DUP-20131223
EB-20131223
MW-31S/20131223
MW-36/20131223
MW-37B/20131223
MW-37D/20131223
S315684-CCV1
TB-20131223

Laboratory Control Samples:

1331210 BS/BSD

Acetone percent recoveries (127/152) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-31B/20131223
MW-31S/20131223
MW-36/20131223

Carbon tetrachloride percent recoveries (73/66) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-31B/20131223
MW-31S/20131223
MW-36/20131223

1331210 BSD

1,4-Dioxane RPD 25% (20%) is outside individual acceptance criteria.

1400027 BS/BSD

1,1,1-Trichloroethane percent recoveries (129/136) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

1,1,2-Trichlorotrifluoroethane (Freon 113) percent recoveries (123/134) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

1,2-Dibromo-3-chloropropane percent recoveries (137/128) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

2,2-Dichloropropane percent recoveries (142/146) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

SW846 8260C

Laboratory Control Samples:

1400027 BS/BSD

Acetone percent recoveries (115/135) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

Bromoform percent recoveries (125/131) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

Carbon tetrachloride percent recoveries (132/135) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

DUP-20131223

1400027-BSD1

LCS/LCSD were analyzed in place of MS/MSD.

Spikes:

1330974-MS1 *Source: SB82439-03*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,2-Dibromo-3-chloropropane
Bromoform

1330974-MSD1 *Source: SB82439-03*

The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

1,2-Dibromo-3-chloropropane
Bromoform
Dibromochloromethane

Samples:

S315684-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

4-Isopropyltoluene (20.7%)
Bromoform (-23.6%)
Ethyl tert-butyl ether (23.6%)
Methyl tert-butyl ether (21.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,2-Dibromo-3-chloropropane (-21.7%)

SW846 8260C

Samples:

S315684-CCV1

This affected the following samples:

1330974-BLK1
1330974-BS1
1330974-BSD1
1330974-MS1
1330974-MSD1
DUP-20131223
EB-20131223
MW-31S/20131223
MW-36/20131223
MW-37B/20131223
MW-37D/20131223
TB-20131223

S315803-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,2,2-Tetrachloroethane (21.0%)
Dichlorodifluoromethane (Freon12) (20.5%)
Ethyl ether (21.1%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,4-Dioxane (20.6%)
Acetone (27.4%)
Carbon tetrachloride (-27.2%)
Ethanol (30.1%)

This affected the following samples:

1331210-BLK1
1331210-BS1
1331210-BSD1
MW-31B/20131223
MW-31S/20131223
MW-36/20131223

S400003-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1,2-Tetrachloroethane (20.6%)
1,1,1-Trichloroethane (28.4%)
1,1,2,2-Tetrachloroethane (21.0%)
2,2-Dichloropropane (49.4%)
Bromodichloromethane (32.2%)
Carbon tetrachloride (32.4%)
trans-1,4-Dichloro-2-butene (27.2%)
Vinyl chloride (20.6%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,2-Dibromo-3-chloropropane (24.0%)
Bromoform (26.1%)
Dibromochloromethane (23.0%)

SW846 8260C

Samples:

S400003-CCV1

This affected the following samples:

1400027-BLK1
1400027-BS1
1400027-BSD1
DUP-20131223

SB82439-03 *MW-36/20131223*

Sample data reported for QC purposes only.

SB82439-06 *MW-31S/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82439-06RE1 *MW-31S/20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82439-08 *DUP-20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SB82439-08RE1 *DUP-20131223*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sample Acceptance Check Form

Client: ENVIRON International Corporation - Westford, MA
Project: Envirite RCRA Landfill - Thomaston, CT / 08-14218G2
Work Order: SB82439
Sample(s) received on: 12/23/2013
Received by: Jessica Hoffman

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
1. Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were samples cooled on ice upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were samples refrigerated upon transfer to laboratory representative?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did sample container labels agree with Chain of Custody document?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

TB-20131223

SB82439-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

23-Dec-13 08:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

TB-20131223

SB82439-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

23-Dec-13 08:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	90	70-130 %
2037-26-5	Toluene-d8	100	70-130 %
17060-07-0	1,2-Dichloroethane-d4	100	70-130 %
1868-53-7	Dibromofluoromethane	93	70-130 %

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Sample Identification

EB-20131223

SB82439-02

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

23-Dec-13 13:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

EB-20131223

SB82439-02

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

23-Dec-13 13:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	90		70-130 %									
2037-26-5	Toluene-d8	100		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	102		70-130 %									
1868-53-7	Dibromofluoromethane	93		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330995

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Sample Identification

EB-20131223

SB82439-02

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

23-Dec-13 13:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	07-Jan-14	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	06-Jan-14	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	"	07-Jan-14	"	X
7439-96-5	Manganese	< 0.0043	R06	mg/l	0.0043	0.0012	1	"	"	"	06-Jan-14	"	X
7440-23-5	Sodium	< 0.350	R06	mg/l	0.350	0.0325	1	"	"	"	07-Jan-14	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	06-Jan-14	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	< 1.00		mg/l	1.00	0.124	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	< 0.100		mg/l	0.100	0.0210	1	EPA 300.0	23-Dec-13	24-Dec-13 14:21	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13	24-Dec-13 14:21	"	"	X
	Total Dissolved Solids	7		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	< 1.00		mg/l	1.00	0.353	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	< 1.00		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]

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Sample Identification

MW-36/20131223

SB82439-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:45

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 5.00	D	µg/l	5.00	3.24	5	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 50.0	D	µg/l	50.0	12.8	5	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 2.50	D	µg/l	2.50	2.38	5	"	"	"	"	"	X
71-43-2	Benzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
108-86-1	Bromobenzene	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
74-97-5	Bromoform	< 5.00	D	µg/l	5.00	3.55	5	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 2.50	D	µg/l	2.50	2.40	5	"	"	"	"	"	X
75-25-2	Bromoform	< 5.00	D	µg/l	5.00	3.02	5	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	D	µg/l	10.0	5.70	5	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 50.0	D	µg/l	50.0	9.67	5	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 5.00	D	µg/l	5.00	2.81	5	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 5.00	D	µg/l	5.00	4.10	5	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 10.0	D	µg/l	10.0	6.40	5	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.00	D	µg/l	5.00	2.74	5	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.00	D	µg/l	5.00	3.27	5	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	D	µg/l	10.0	5.00	5	"	"	"	"	"	X
67-66-3	Chloroform	< 5.00	D	µg/l	5.00	3.44	5	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	D	µg/l	10.0	7.36	5	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 5.00	D	µg/l	5.00	3.96	5	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 5.00	D	µg/l	5.00	3.66	5	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 10.0	D	µg/l	10.0	6.00	5	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2.50	D	µg/l	2.50	1.72	5	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 2.50	D	µg/l	2.50	1.80	5	"	"	"	"	"	X
74-95-3	Dibromomethane	< 5.00	D	µg/l	5.00	3.33	5	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.34	5	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.56	5	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.00	D	µg/l	5.00	3.12	5	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	D	µg/l	10.0	2.24	5	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.00	D	µg/l	5.00	3.40	5	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.00	D	µg/l	5.00	3.90	5	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.00	D	µg/l	5.00	2.44	5	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	3.58	5	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.00	D	µg/l	5.00	4.16	5	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.00	D	µg/l	5.00	3.86	5	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 5.00	D	µg/l	5.00	4.36	5	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 5.00	D	µg/l	5.00	3.18	5	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	1.82	5	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2.50	D	µg/l	2.50	2.50	5	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 5.00	D	µg/l	5.00	4.76	5	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 2.50	D	µg/l	2.50	2.44	5	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 50.0	D	µg/l	50.0	3.29	5	"	"	"	"	"	X

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Sample Identification

MW-36/20131223

SB82439-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:45

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 5.00	D	µg/l	5.00	3.10	5	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 5.00	D	µg/l	5.00	3.04	5	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.26	5	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 50.0	D	µg/l	50.0	13.8	5	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	D	µg/l	10.0	4.74	5	"	"	"	"	"	X
91-20-3	Naphthalene	< 5.00	D	µg/l	5.00	2.90	5	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 5.00	D	µg/l	5.00	3.79	5	"	"	"	"	"	X
100-42-5	Styrene	< 5.00	D	µg/l	5.00	3.08	5	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 5.00	D	µg/l	5.00	3.36	5	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2.50	D	µg/l	2.50	1.58	5	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
108-88-3	Toluene	< 5.00	D	µg/l	5.00	4.06	5	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.88	5	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 5.00	D	µg/l	5.00	1.80	5	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 5.00	D	µg/l	5.00	3.92	5	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.00	D	µg/l	5.00	2.91	5	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.00	D	µg/l	5.00	3.21	5	"	"	"	"	"	X
79-01-6	Trichloroethene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.00	D	µg/l	5.00	3.14	5	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 5.00	D	µg/l	5.00	3.68	5	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.78	5	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 5.00	D	µg/l	5.00	3.72	5	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.00	D	µg/l	5.00	4.04	5	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 10.0	D	µg/l	10.0	8.20	5	"	"	"	"	"	X
95-47-6	o-Xylene	< 5.00	D	µg/l	5.00	4.41	5	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 10.0	D	µg/l	10.0	7.21	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 5.00	D	µg/l	5.00	3.46	5	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 5.00	D	µg/l	5.00	3.60	5	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 5.00	D	µg/l	5.00	3.91	5	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 5.00	D	µg/l	5.00	3.64	5	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 50.0	D	µg/l	50.0	43.2	5	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 100	D	µg/l	100	60.0	5	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 25.0	D	µg/l	25.0	3.68	5	"	"	"	"	"	X
64-17-5	Ethanol	< 2000	D	µg/l	2000	175	5	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	88	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	100	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	101	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	93	70-130 %	"	"	"	"	"	"	"	"	"	"

Re-analysis of Volatile Organic Compounds by SW846

8260

Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

MW-36/20131223

SB82439-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:45

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	30-Dec-13	31-Dec-13	NAA	1331210	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X

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Sample Identification

MW-36/20131223

SB82439-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:45

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	SW846 8260C	30-Dec-13	31-Dec-13	NAA	1331210	X
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromoanisole	92	70-130 %	"	"	"	"
2037-26-5	Toluene-d8	107	70-130 %	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	114	70-130 %	"	"	"	"
1868-53-7	Dibromofluoromethane	111	70-130 %	"	"	"	"

Total Metals by EPA 200/6000 Series Methods

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Sample Identification

MW-36/20131223

SB82439-03

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:45

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			LNB	1330995	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	0.0490		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	07-Jan-14	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	06-Jan-14	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0563		mg/l	0.0150	0.0074	1	"	"	07-Jan-14	"	"	X
7439-96-5	Manganese	< 0.0043	R06	mg/l	0.0043	0.0012	1	"	"	06-Jan-14	"	"	X
7440-23-5	Sodium	36.5	R06	mg/l	0.350	0.0325	1	"	"	07-Jan-14	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	06-Jan-14	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	60.5	GS1, D	mg/l	2.00	0.248	2	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	0.450		mg/l	0.100	0.0210	1	EPA 300.0	23-Dec-13 14:21	24-Dec-13 01:30	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13 14:21	24-Dec-13 01:30	"	"	X
	Total Dissolved Solids	158		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	6.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	30.8		mg/l	1.00	0.353	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	< 1.00		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	'[none]'

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Sample Identification

MW-37D/20131223

SB82439-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 10:50

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-37D/20131223

SB82439-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 10:50

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	89	70-130 %										
2037-26-5	Toluene-d8	100	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	100	70-130 %										
1868-53-7	Dibromofluoromethane	93	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330995
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Sample Identification

MW-37D/20131223

SB82439-04

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 10:50

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	0.0532		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	07-Jan-14	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	06-Jan-14	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0616		mg/l	0.0150	0.0074	1	"	"	"	07-Jan-14	"	X
7439-96-5	Manganese	< 0.0043	R06	mg/l	0.0043	0.0012	1	"	"	"	06-Jan-14	"	X
7440-23-5	Sodium	37.7	R06	mg/l	0.350	0.0325	1	"	"	"	07-Jan-14	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	06-Jan-14	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0050		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	67.1	GS1, D	mg/l	3.00	0.372	3	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	0.922		mg/l	0.100	0.0210	1	EPA 300.0	23-Dec-13	24-Dec-13 14:21	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13	24-Dec-13 14:21	"	"	X
	Total Dissolved Solids	172		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	31.1		mg/l	1.00	0.353	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	< 1.00		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]

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Sample Identification

MW-37B/20131223

SB82439-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 12:30

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-37B/20131223

SB82439-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 12:30

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	89	70-130 %										
2037-26-5	Toluene-d8	100	70-130 %										
17060-07-0	1,2-Dichloroethane-d4	100	70-130 %										
1868-53-7	Dibromofluoromethane	91	70-130 %										

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330995

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Sample Identification

MW-37B/20131223

SB82439-05

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 12:30

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	0.0734		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	07-Jan-14	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	06-Jan-14	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0178		mg/l	0.0150	0.0074	1	"	"	"	07-Jan-14	"	X
7439-96-5	Manganese	< 0.0043	R06	mg/l	0.0043	0.0012	1	"	"	"	06-Jan-14	"	X
7440-23-5	Sodium	15.9	R06	mg/l	0.350	0.0325	1	"	"	"	07-Jan-14	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	06-Jan-14	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0090		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	54.5	GS1, D	mg/l	2.00	0.248	2	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	0.462		mg/l	0.100	0.0210	1	EPA 300.0	23-Dec-13	24-Dec-13 14:21	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13	24-Dec-13 14:21	"	"	X
	Total Dissolved Solids	205		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	39.7		mg/l	1.00	0.353	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	< 1.00		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	<10		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]

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Sample Identification

MW-31S/20131223

SB82439-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 14:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 500	D	µg/l	500	324	500	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 5000	D	µg/l	5000	1280	500	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 250	D	µg/l	250	238	500	"	"	"	"	"	X
71-43-2	Benzene	< 500	D	µg/l	500	334	500	"	"	"	"	"	X
108-86-1	Bromobenzene	< 500	D	µg/l	500	360	500	"	"	"	"	"	X
74-97-5	Bromoform	< 500	D	µg/l	500	355	500	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 250	D	µg/l	250	240	500	"	"	"	"	"	X
75-25-2	Bromoform	< 500	D	µg/l	500	302	500	"	"	"	"	"	X
74-83-9	Bromomethane	< 1000	D	µg/l	1000	570	500	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	6,180	D	µg/l	5000	967	500	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 500	D	µg/l	500	281	500	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 500	D	µg/l	500	410	500	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 500	D	µg/l	500	372	500	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 1000	D	µg/l	1000	640	500	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 500	D	µg/l	500	274	500	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 500	D	µg/l	500	327	500	"	"	"	"	"	X
75-00-3	Chloroethane	< 1000	D	µg/l	1000	500	500	"	"	"	"	"	X
67-66-3	Chloroform	< 500	D	µg/l	500	344	500	"	"	"	"	"	X
74-87-3	Chloromethane	< 1000	D	µg/l	1000	736	500	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 500	D	µg/l	500	396	500	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 500	D	µg/l	500	366	500	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 1000	D	µg/l	1000	600	500	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 250	D	µg/l	250	172	500	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 250	D	µg/l	250	180	500	"	"	"	"	"	X
74-95-3	Dibromomethane	< 500	D	µg/l	500	333	500	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 500	D	µg/l	500	334	500	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 500	D	µg/l	500	356	500	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 500	D	µg/l	500	312	500	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 1000	D	µg/l	1000	224	500	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 500	D	µg/l	500	340	500	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 500	D	µg/l	500	390	500	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 500	D	µg/l	500	244	500	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	6,500	D	µg/l	500	358	500	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 500	D	µg/l	500	416	500	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 500	D	µg/l	500	386	500	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 500	D	µg/l	500	404	500	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 500	D	µg/l	500	436	500	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 500	D	µg/l	500	318	500	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 250	D	µg/l	250	182	500	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 250	D	µg/l	250	250	500	"	"	"	"	"	X
100-41-4	Ethylbenzene	6,410	D	µg/l	500	476	500	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 250	D	µg/l	250	244	500	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 5000	D	µg/l	5000	329	500	"	"	"	"	"	X

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Sample Identification

MW-31S/20131223

SB82439-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 14:00

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 500	D	µg/l	500	310	500	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 500	D	µg/l	500	304	500	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 500	D	µg/l	500	326	500	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	41,000	D, E	µg/l	5000	1380	500	"	"	"	"	"	X
75-09-2	Methylene chloride	< 1000	D	µg/l	1000	474	500	"	"	"	"	"	X
91-20-3	Naphthalene	< 500	D	µg/l	500	290	500	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 500	D	µg/l	500	379	500	"	"	"	"	"	X
100-42-5	Styrene	< 500	D	µg/l	500	308	500	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 500	D	µg/l	500	336	500	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 250	D	µg/l	250	158	500	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 500	D	µg/l	500	372	500	"	"	"	"	"	X
108-88-3	Toluene	21,700	D	µg/l	500	406	500	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 500	D	µg/l	500	188	500	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 500	D	µg/l	500	180	500	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 500	D	µg/l	500	392	500	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 500	D	µg/l	500	291	500	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 500	D	µg/l	500	321	500	"	"	"	"	"	X
79-01-6	Trichloroethene	< 500	D	µg/l	500	378	500	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 500	D	µg/l	500	314	500	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 500	D	µg/l	500	368	500	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	660	D	µg/l	500	378	500	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 500	D	µg/l	500	372	500	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 500	D	µg/l	500	404	500	"	"	"	"	"	X
179601-23-1	m,p-Xylene	13,400	D	µg/l	1000	820	500	"	"	"	"	"	X
95-47-6	o-Xylene	5,080	D	µg/l	500	441	500	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 1000	D	µg/l	1000	721	500	"	"	"	"	"	
60-29-7	Ethyl ether	< 500	D	µg/l	500	346	500	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 500	D	µg/l	500	360	500	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 500	D	µg/l	500	391	500	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 500	D	µg/l	500	364	500	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 5000	D	µg/l	5000	4320	500	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 10000	D	µg/l	10000	6000	500	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 2500	D	µg/l	2500	368	500	"	"	"	"	"	X
64-17-5	Ethanol	< 200000	D	µg/l	200000	17500	500	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	96		70-130 %									
2037-26-5	Toluene-d8	104		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	100		70-130 %									
1868-53-7	Dibromofluoromethane	92		70-130 %									

Re-analysis of Volatile Organic Compounds by SW846

GS1

8260

Prepared by method SW846 5030 Water MS

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Sample Identification

MW-31S/20131223

SB82439-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 14:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1000	D	µg/l	1000	647	1000	SW846 8260C	30-Dec-13	31-Dec-13	NAA	1331210	X
67-64-1	Acetone	< 10000	D	µg/l	10000	2560	1000	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 500	D	µg/l	500	475	1000	"	"	"	"	"	X
71-43-2	Benzene	< 1000	D	µg/l	1000	669	1000	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1000	D	µg/l	1000	721	1000	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1000	D	µg/l	1000	710	1000	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 500	D	µg/l	500	479	1000	"	"	"	"	"	X
75-25-2	Bromoform	< 1000	D	µg/l	1000	603	1000	"	"	"	"	"	X
74-83-9	Bromomethane	< 2000	D	µg/l	2000	1140	1000	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	10,400	D	µg/l	10000	1930	1000	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1000	D	µg/l	1000	562	1000	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1000	D	µg/l	1000	820	1000	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1000	D	µg/l	1000	745	1000	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2000	D	µg/l	2000	1280	1000	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1000	D	µg/l	1000	549	1000	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1000	D	µg/l	1000	654	1000	"	"	"	"	"	X
75-00-3	Chloroethane	< 2000	D	µg/l	2000	1000	1000	"	"	"	"	"	X
67-66-3	Chloroform	< 1000	D	µg/l	1000	689	1000	"	"	"	"	"	X
74-87-3	Chloromethane	< 2000	D	µg/l	2000	1470	1000	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1000	D	µg/l	1000	791	1000	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1000	D	µg/l	1000	731	1000	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2000	D	µg/l	2000	1200	1000	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 500	D	µg/l	500	343	1000	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 500	D	µg/l	500	361	1000	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1000	D	µg/l	1000	666	1000	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1000	D	µg/l	1000	668	1000	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1000	D	µg/l	1000	712	1000	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1000	D	µg/l	1000	624	1000	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2000	D	µg/l	2000	447	1000	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1000	D	µg/l	1000	680	1000	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1000	D	µg/l	1000	781	1000	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1000	D	µg/l	1000	488	1000	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	7,820	D	µg/l	1000	716	1000	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1000	D	µg/l	1000	832	1000	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1000	D	µg/l	1000	771	1000	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1000	D	µg/l	1000	807	1000	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1000	D	µg/l	1000	872	1000	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1000	D	µg/l	1000	636	1000	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 500	D	µg/l	500	364	1000	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 500	D	µg/l	500	499	1000	"	"	"	"	"	X
100-41-4	Ethylbenzene	5,200	D	µg/l	1000	951	1000	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 500	D	µg/l	500	489	1000	"	"	"	"	"	X

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Sample Identification

MW-31S/20131223

SB82439-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 14:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 10000	D	µg/l	10000	658	1000	SW846 8260C	30-Dec-13	31-Dec-13	NAA	1331210	X
98-82-8	Isopropylbenzene	< 1000	D	µg/l	1000	621	1000	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 1000	D	µg/l	1000	609	1000	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1000	D	µg/l	1000	652	1000	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	38,500	D	µg/l	10000	2760	1000	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2000	D	µg/l	2000	947	1000	"	"	"	"	"	X
91-20-3	Naphthalene	< 1000	D	µg/l	1000	579	1000	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1000	D	µg/l	1000	758	1000	"	"	"	"	"	X
100-42-5	Styrene	< 1000	D	µg/l	1000	615	1000	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1000	D	µg/l	1000	672	1000	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 500	D	µg/l	500	317	1000	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1000	D	µg/l	1000	743	1000	"	"	"	"	"	X
108-88-3	Toluene	23,200	D	µg/l	1000	812	1000	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1000	D	µg/l	1000	376	1000	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1000	D	µg/l	1000	360	1000	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1000	D	µg/l	1000	784	1000	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1000	D	µg/l	1000	582	1000	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1000	D	µg/l	1000	642	1000	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1000	D	µg/l	1000	755	1000	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1000	D	µg/l	1000	628	1000	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1000	D	µg/l	1000	736	1000	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1000	D	µg/l	1000	757	1000	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1000	D	µg/l	1000	744	1000	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1000	D	µg/l	1000	807	1000	"	"	"	"	"	X
179601-23-1	m,p-Xylene	9,980	D	µg/l	2000	1640	1000	"	"	"	"	"	X
95-47-6	o-Xylene	3,950	D	µg/l	1000	882	1000	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2000	D	µg/l	2000	1440	1000	"	"	"	"	"	
60-29-7	Ethyl ether	< 1000	D	µg/l	1000	693	1000	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1000	D	µg/l	1000	719	1000	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1000	D	µg/l	1000	782	1000	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1000	D	µg/l	1000	727	1000	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10000	D	µg/l	10000	8640	1000	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20000	D	µg/l	20000	12000	1000	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5000	D	µg/l	5000	737	1000	"	"	"	"	"	X
64-17-5	Ethanol	< 400000	D	µg/l	400000	35000	1000	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	4-Bromo- <i>o</i> -fluorobenzene	97			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	109			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	114			70-130 %			"	"	"	"	"	
1868-53-7	Dibromo- <i>o</i> -fluoromethane	111			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													

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Sample Identification

MW-31S/20131223

SB82439-06

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 14:00

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			LNB	1330995	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	0.0971		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	07-Jan-14	"	"	X
7440-47-3	Chromium	0.0174		mg/l	0.0050	0.0009	1	"	"	06-Jan-14	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	82.6		mg/l	0.0150	0.0074	1	"	"	07-Jan-14	"	"	X
7439-96-5	Manganese	4.14	R06	mg/l	0.0043	0.0012	1	"	"	06-Jan-14	"	"	X
7440-23-5	Sodium	40.5	R06	mg/l	0.350	0.0325	1	"	"	07-Jan-14	"	"	X
7440-02-0	Nickel	0.0614		mg/l	0.0050	0.0007	1	"	"	06-Jan-14	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	1.11		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	12.8	GS1, D	mg/l	0.500	0.350	5	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	115	GS1, D	mg/l	5.00	0.620	5	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	< 0.100		mg/l	0.100	0.0210	1	EPA 300.0	23-Dec-13 14:21	24-Dec-13 03:50	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13 14:21	24-Dec-13 04:11	"	"	X
	Total Dissolved Solids	466		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	30.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	< 1.00		mg/l	1.00	0.353	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	129	GS1,LIV	mg/l	40.0	11.3	1	SM 5310B	30-Dec-13	31-Dec-13	TDD	1331403	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	0.795		mg/L	0.075	0.075	5	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	3,020		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	'[none]'

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Sample Identification

MW-31B/20131223

SB82439-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:40

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	30-Dec-13	31-Dec-13	NAA	1331210	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	33.5		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

MW-31B/20131223

SB82439-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:40

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	30-Dec-13	31-Dec-13	NAA	1331210	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	2.07		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	14.9		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92		70-130 %									
2037-26-5	Toluene-d8	105		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	86		70-130 %									
1868-53-7	Dibromofluoromethane	111		70-130 %									

Total Metals by EPA 200/6000 Series Methods

Preservation	Field Preserved	N/A	1	EPA 200/6000 methods	LNB	1330995
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Sample Identification

MW-31B/20131223

SB82439-07

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 09:40

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	0.0289		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	07-Jan-14	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	06-Jan-14	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	"	07-Jan-14	"	X
7439-96-5	Manganese	0.0352	R06	mg/l	0.0043	0.0012	1	"	"	"	06-Jan-14	"	X
7440-23-5	Sodium	88.8	R06	mg/l	0.350	0.0325	1	"	"	"	07-Jan-14	"	X
7440-02-0	Nickel	0.131		mg/l	0.0050	0.0007	1	"	"	"	06-Jan-14	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	0.0342		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	< 0.100		mg/l	0.100	0.070	1	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	309	GS1, D	mg/l	24.0	2.98	24	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	43.3	GS1, D	mg/l	2.40	0.504	24	EPA 300.0	23-Dec-13	24-Dec-13 14:21	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13	24-Dec-13 14:21	"	"	X
	Total Dissolved Solids	1,850		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	< 5.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	629	GS1, D	mg/l	24.0	8.47	24	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	5.95		mg/l	1.00	0.283	1	SM 5310B	27-Dec-13	27-Dec-13	TDD	1331217	X
Subcontracted Analyses													
Analysis performed by Phoenix Environmental Labs, Inc. * - CT007													
64743-03-9	Phenolics	< 0.015		mg/L	0.015	0.015	1	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
Analysis performed by Sterling Analytical Lab - PH-05													
	Total Organic Halides	28.9		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	[none]

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Sample Identification

DUP-20131223

SB82439-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 00:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Compounds by SW846 8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 500	D	µg/l	500	324	500	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
67-64-1	Acetone	< 5000	D	µg/l	5000	1280	500	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 250	D	µg/l	250	238	500	"	"	"	"	"	X
71-43-2	Benzene	< 500	D	µg/l	500	334	500	"	"	"	"	"	X
108-86-1	Bromobenzene	< 500	D	µg/l	500	360	500	"	"	"	"	"	X
74-97-5	Bromoform	< 500	D	µg/l	500	355	500	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 250	D	µg/l	250	240	500	"	"	"	"	"	X
75-25-2	Bromoform	< 500	D	µg/l	500	302	500	"	"	"	"	"	X
74-83-9	Bromomethane	< 1000	D	µg/l	1000	570	500	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	7,700	D	µg/l	5000	967	500	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 500	D	µg/l	500	281	500	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 500	D	µg/l	500	410	500	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 500	D	µg/l	500	372	500	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 1000	D	µg/l	1000	640	500	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 500	D	µg/l	500	274	500	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 500	D	µg/l	500	327	500	"	"	"	"	"	X
75-00-3	Chloroethane	< 1000	D	µg/l	1000	500	500	"	"	"	"	"	X
67-66-3	Chloroform	< 500	D	µg/l	500	344	500	"	"	"	"	"	X
74-87-3	Chloromethane	< 1000	D	µg/l	1000	736	500	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 500	D	µg/l	500	396	500	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 500	D	µg/l	500	366	500	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 1000	D	µg/l	1000	600	500	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 250	D	µg/l	250	172	500	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 250	D	µg/l	250	180	500	"	"	"	"	"	X
74-95-3	Dibromomethane	< 500	D	µg/l	500	333	500	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 500	D	µg/l	500	334	500	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 500	D	µg/l	500	356	500	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 500	D	µg/l	500	312	500	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 1000	D	µg/l	1000	224	500	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 500	D	µg/l	500	340	500	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 500	D	µg/l	500	390	500	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 500	D	µg/l	500	244	500	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	6,800	D	µg/l	500	358	500	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 500	D	µg/l	500	416	500	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 500	D	µg/l	500	386	500	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 500	D	µg/l	500	404	500	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 500	D	µg/l	500	436	500	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 500	D	µg/l	500	318	500	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 250	D	µg/l	250	182	500	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 250	D	µg/l	250	250	500	"	"	"	"	"	X
100-41-4	Ethylbenzene	6,340	D	µg/l	500	476	500	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 250	D	µg/l	250	244	500	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 5000	D	µg/l	5000	329	500	"	"	"	"	"	X

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Sample Identification

DUP-20131223

SB82439-08

Client Project #

08-14218G2

Matrix

Ground Water

Collection Date/Time

23-Dec-13 00:00

Received

23-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
GS1													
98-82-8	Isopropylbenzene	< 500	D	µg/l	500	310	500	SW846 8260C	26-Dec-13	26-Dec-13	SJB	1330974	X
99-87-6	4-Isopropyltoluene	< 500	D	µg/l	500	304	500	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 500	D	µg/l	500	326	500	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	39,100	D, E	µg/l	5000	1380	500	"	"	"	"	"	X
75-09-2	Methylene chloride	< 1000	D	µg/l	1000	474	500	"	"	"	"	"	X
91-20-3	Naphthalene	< 500	D	µg/l	500	290	500	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 500	D	µg/l	500	379	500	"	"	"	"	"	X
100-42-5	Styrene	< 500	D	µg/l	500	308	500	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 500	D	µg/l	500	336	500	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 250	D	µg/l	250	158	500	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 500	D	µg/l	500	372	500	"	"	"	"	"	X
108-88-3	Toluene	21,800	D	µg/l	500	406	500	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 500	D	µg/l	500	188	500	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 500	D	µg/l	500	180	500	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 500	D	µg/l	500	392	500	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 500	D	µg/l	500	291	500	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 500	D	µg/l	500	321	500	"	"	"	"	"	X
79-01-6	Trichloroethene	< 500	D	µg/l	500	378	500	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 500	D	µg/l	500	314	500	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 500	D	µg/l	500	368	500	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	595	D	µg/l	500	378	500	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 500	D	µg/l	500	372	500	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 500	D	µg/l	500	404	500	"	"	"	"	"	X
179601-23-1	m,p-Xylene	13,400	D	µg/l	1000	820	500	"	"	"	"	"	X
95-47-6	o-Xylene	5,100	D	µg/l	500	441	500	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 1000	D	µg/l	1000	721	500	"	"	"	"	"	
60-29-7	Ethyl ether	< 500	D	µg/l	500	346	500	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 500	D	µg/l	500	360	500	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 500	D	µg/l	500	391	500	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 500	D	µg/l	500	364	500	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 5000	D	µg/l	5000	4320	500	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 10000	D	µg/l	10000	6000	500	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 2500	D	µg/l	2500	368	500	"	"	"	"	"	X
64-17-5	Ethanol	< 200000	D	µg/l	200000	17500	500	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	98		70-130 %									
2037-26-5	Toluene-d8	106		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	102		70-130 %									
1868-53-7	Dibromofluoromethane	95		70-130 %									

Re-analysis of Volatile Organic Compounds by SW846

GS1

8260

Prepared by method SW846 5030 Water MS

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Sample Identification

DUP-20131223

SB82439-08

Client Project #

08-14218G2

Matrix

Ground Water

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Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1000	D	µg/l	1000	647	1000	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10000	D	µg/l	10000	2560	1000	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 500	D	µg/l	500	475	1000	"	"	"	"	"	X
71-43-2	Benzene	< 1000	D	µg/l	1000	669	1000	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1000	D	µg/l	1000	721	1000	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1000	D	µg/l	1000	710	1000	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 500	D	µg/l	500	479	1000	"	"	"	"	"	X
75-25-2	Bromoform	< 1000	D	µg/l	1000	603	1000	"	"	"	"	"	X
74-83-9	Bromomethane	< 2000	D	µg/l	2000	1140	1000	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10000	D	µg/l	10000	1930	1000	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1000	D	µg/l	1000	562	1000	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1000	D	µg/l	1000	820	1000	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1000	D	µg/l	1000	745	1000	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2000	D	µg/l	2000	1280	1000	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1000	D	µg/l	1000	549	1000	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1000	D	µg/l	1000	654	1000	"	"	"	"	"	X
75-00-3	Chloroethane	< 2000	D	µg/l	2000	1000	1000	"	"	"	"	"	X
67-66-3	Chloroform	< 1000	D	µg/l	1000	689	1000	"	"	"	"	"	X
74-87-3	Chloromethane	< 2000	D	µg/l	2000	1470	1000	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1000	D	µg/l	1000	791	1000	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1000	D	µg/l	1000	731	1000	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2000	D	µg/l	2000	1200	1000	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 500	D	µg/l	500	343	1000	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 500	D	µg/l	500	361	1000	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1000	D	µg/l	1000	666	1000	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1000	D	µg/l	1000	668	1000	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1000	D	µg/l	1000	712	1000	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1000	D	µg/l	1000	624	1000	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2000	D	µg/l	2000	447	1000	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1000	D	µg/l	1000	680	1000	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1000	D	µg/l	1000	781	1000	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1000	D	µg/l	1000	488	1000	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	9,280	D	µg/l	1000	716	1000	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1000	D	µg/l	1000	832	1000	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1000	D	µg/l	1000	771	1000	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1000	D	µg/l	1000	807	1000	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1000	D	µg/l	1000	872	1000	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1000	D	µg/l	1000	636	1000	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 500	D	µg/l	500	364	1000	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 500	D	µg/l	500	499	1000	"	"	"	"	"	X
100-41-4	Ethylbenzene	6,610	D	µg/l	1000	951	1000	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 500	D	µg/l	500	489	1000	"	"	"	"	"	X

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Sample Identification

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SB82439-08

Client Project #

08-14218G2

Matrix

Ground Water

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23-Dec-13 00:00

Received

23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 10000	D	µg/l	10000	658	1000	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
98-82-8	Isopropylbenzene	< 1000	D	µg/l	1000	621	1000	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 1000	D	µg/l	1000	609	1000	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1000	D	µg/l	1000	652	1000	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	35,200	D	µg/l	10000	2760	1000	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2000	D	µg/l	2000	947	1000	"	"	"	"	"	X
91-20-3	Naphthalene	< 1000	D	µg/l	1000	579	1000	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1000	D	µg/l	1000	758	1000	"	"	"	"	"	X
100-42-5	Styrene	< 1000	D	µg/l	1000	615	1000	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1000	D	µg/l	1000	672	1000	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 500	D	µg/l	500	317	1000	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1000	D	µg/l	1000	743	1000	"	"	"	"	"	X
108-88-3	Toluene	25,500	D	µg/l	1000	812	1000	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1000	D	µg/l	1000	376	1000	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1000	D	µg/l	1000	360	1000	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1000	D	µg/l	1000	784	1000	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1000	D	µg/l	1000	582	1000	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1000	D	µg/l	1000	642	1000	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1000	D	µg/l	1000	755	1000	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1000	D	µg/l	1000	628	1000	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1000	D	µg/l	1000	736	1000	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1000	D	µg/l	1000	757	1000	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1000	D	µg/l	1000	744	1000	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1000	D	µg/l	1000	807	1000	"	"	"	"	"	X
179601-23-1	m,p-Xylene	13,500	D	µg/l	2000	1640	1000	"	"	"	"	"	X
95-47-6	o-Xylene	5,220	D	µg/l	1000	882	1000	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2000	D	µg/l	2000	1440	1000	"	"	"	"	"	
60-29-7	Ethyl ether	< 1000	D	µg/l	1000	693	1000	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1000	D	µg/l	1000	719	1000	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1000	D	µg/l	1000	782	1000	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1000	D	µg/l	1000	727	1000	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10000	D	µg/l	10000	8640	1000	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20000	D	µg/l	20000	12000	1000	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5000	D	µg/l	5000	737	1000	"	"	"	"	"	X
64-17-5	Ethanol	< 400000	D	µg/l	400000	35000	1000	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	4-Bromo- <i>o</i> -fluorobenzene	103			70-130 %			"	"	"	"	"	
2037-26-5	Toluene-d8	105			70-130 %			"	"	"	"	"	
17060-07-0	1,2-Dichloroethane-d4	115			70-130 %			"	"	"	"	"	
1868-53-7	Dibromo- <i>o</i> -fluoromethane	120			70-130 %			"	"	"	"	"	
Total Metals by EPA 200/6000 Series Methods													

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Sample Identification

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SB82439-08

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Matrix

Ground Water

Collection Date/Time

23-Dec-13 00:00

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23-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation		Field Preserved	N/A			1	EPA 200/6000 methods			LNB	1330995	
Total Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	0.0042		mg/l	0.0040	0.0018	1	SW846 6010C	31-Dec-13	06-Jan-14	arf	1331280	X
7440-39-3	Barium	0.0978		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	07-Jan-14	"	X
7440-47-3	Chromium	0.0176		mg/l	0.0050	0.0009	1	"	"	"	06-Jan-14	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	82.0		mg/l	0.0150	0.0074	1	"	"	"	07-Jan-14	"	X
7439-96-5	Manganese	4.14	R06	mg/l	0.0043	0.0012	1	"	"	"	06-Jan-14	"	X
7440-23-5	Sodium	40.9	R06	mg/l	0.350	0.0325	1	"	"	"	07-Jan-14	"	X
7440-02-0	Nickel	0.0640		mg/l	0.0050	0.0007	1	"	"	"	06-Jan-14	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	1.14		mg/l	0.0050	0.0020	1	"	"	"	"	"	X
General Chemistry Parameters													
	Ammonia as N	12.8	GS1, D	mg/l	0.400	0.280	4	EPA 350.1	26-Dec-13	27-Dec-13	RLT	1330967	X
16887-00-6	Chloride	136	GS1, D	mg/l	5.00	0.620	5	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
57-12-5	Cyanide (total)	< 0.00500		mg/l	0.00500	0.00360	1	EPA 335.4 / SW846 9012B	03-Jan-14	03-Jan-14	RLT	1400190	X
14797-55-8	Nitrate as N	< 0.100		mg/l	0.100	0.0210	1	EPA 300.0	23-Dec-13 14:21	24-Dec-13 08:20	ELE	1330853	X
14797-65-0	Nitrite as N	< 0.100		mg/l	0.100	0.0990	1	"	23-Dec-13 14:21	24-Dec-13 08:41	"	"	X
	Total Dissolved Solids	478		mg/l	5	3	1	SM2540C	27-Dec-13	30-Dec-13	BD	1331086	X
	Total Suspended Solids	31.0		mg/l	5.0	1.7	1	SM2540D	24-Dec-13	26-Dec-13	BD	1330892	X
14808-79-8	Sulfate as SO4	< 1.00		mg/l	1.00	0.353	1	EPA 300.0	23-Dec-13	24-Dec-13	ELE	1330853	X
	Total Organic Carbon	144	GS1,LIV	mg/l	40.0	11.3	1	SM 5310B	30-Dec-13	31-Dec-13	TDD	1331403	X
Subcontracted Analyses													
<i>Analysis performed by Phoenix Environmental Labs, Inc. * - CT007</i>													
64743-03-9	Phenolics	0.780		mg/L	0.075	0.075	5	E420.4	30-Dec-13	30-Dec-13	PH061	263339A	
Subcontracted Analyses													
<i>Analysis performed by Sterling Analytical Lab - PH-05</i>													
	Total Organic Halides	3,100		µg/l	10		1	SW846 9020B			02-Jan-14	PH-05	['none']

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330974 - SW846 5030 Water MS										
<u>Blank (1330974-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330974 - SW846 5030 Water MS										
<u>Blank (1330974-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	44.2		µg/l	50.0		88		70-130		
Surrogate: Toluene-d8	50.0		µg/l	50.0		100		70-130		
Surrogate: 1,2-Dichloroethane-d4	51.3		µg/l	50.0		103		70-130		
Surrogate: Dibromofluoromethane	49.5		µg/l	50.0		99		70-130		
<u>LCS (1330974-BS1)</u>										
Prepared & Analyzed: 26-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.1		µg/l	20.0		105		70-130		
Acetone	20.4		µg/l	20.0		102		70-130		
Acrylonitrile	18.4		µg/l	20.0		92		70-130		
Benzene	21.3		µg/l	20.0		107		70-130		
Bromobenzene	19.3		µg/l	20.0		96		70-130		
Bromoform	17.9		µg/l	20.0		90		70-130		
Bromochloromethane	15.8		µg/l	20.0		79		70-130		
Bromodichloromethane	14.3		µg/l	20.0		72		70-130		
Bromomethane	21.7		µg/l	20.0		109		70-130		
2-Butanone (MEK)	19.2		µg/l	20.0		96		70-130		
n-Butylbenzene	22.2		µg/l	20.0		111		70-130		
sec-Butylbenzene	21.0		µg/l	20.0		105		70-130		
tert-Butylbenzene	20.8		µg/l	20.0		104		70-130		
Carbon disulfide	17.3		µg/l	20.0		87		70-130		
Carbon tetrachloride	16.5		µg/l	20.0		83		70-130		
Chlorobenzene	19.4		µg/l	20.0		97		70-130		
Chloroethane	19.3		µg/l	20.0		97		70-130		
Chloroform	18.9		µg/l	20.0		94		70-130		
Chloromethane	19.2		µg/l	20.0		96		70-130		
2-Chlorotoluene	21.2		µg/l	20.0		106		70-130		
4-Chlorotoluene	21.7		µg/l	20.0		108		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330974 - SW846 5030 Water MS										
<u>LCS (1330974-BS1)</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
1,2-Dibromo-3-chloropropane	16.1		µg/l		20.0	81	70-130			
Dibromochloromethane	15.7		µg/l		20.0	78	70-130			
1,2-Dibromoethane (EDB)	19.6		µg/l		20.0	98	70-130			
Dibromomethane	19.2		µg/l		20.0	96	70-130			
1,2-Dichlorobenzene	20.8		µg/l		20.0	104	70-130			
1,3-Dichlorobenzene	20.6		µg/l		20.0	103	70-130			
1,4-Dichlorobenzene	19.2		µg/l		20.0	96	70-130			
Dichlorodifluoromethane (Freon12)	17.8		µg/l		20.0	89	70-130			
1,1-Dichloroethane	19.1		µg/l		20.0	96	70-130			
1,2-Dichloroethane	18.4		µg/l		20.0	92	70-130			
1,1-Dichloroethene	19.1		µg/l		20.0	96	70-130			
cis-1,2-Dichloroethene	18.7		µg/l		20.0	93	70-130			
trans-1,2-Dichloroethene	17.9		µg/l		20.0	90	70-130			
1,2-Dichloropropane	19.5		µg/l		20.0	97	70-130			
1,3-Dichloropropane	19.3		µg/l		20.0	97	70-130			
2,2-Dichloropropane	18.1		µg/l		20.0	90	70-130			
1,1-Dichloropropene	21.1		µg/l		20.0	105	70-130			
cis-1,3-Dichloropropene	18.0		µg/l		20.0	90	70-130			
trans-1,3-Dichloropropene	17.9		µg/l		20.0	90	70-130			
Ethylbenzene	22.3		µg/l		20.0	111	70-130			
Hexachlorobutadiene	20.9		µg/l		20.0	104	70-130			
2-Hexanone (MBK)	20.2		µg/l		20.0	101	70-130			
Isopropylbenzene	22.0		µg/l		20.0	110	70-130			
4-Isopropyltoluene	24.1		µg/l		20.0	120	70-130			
Methyl tert-butyl ether	23.7		µg/l		20.0	119	70-130			
4-Methyl-2-pentanone (MIBK)	22.8		µg/l		20.0	114	70-130			
Methylene chloride	19.8		µg/l		20.0	99	70-130			
Naphthalene	22.8		µg/l		20.0	114	70-130			
n-Propylbenzene	20.8		µg/l		20.0	104	70-130			
Styrene	20.6		µg/l		20.0	103	70-130			
1,1,1,2-Tetrachloroethane	17.1		µg/l		20.0	85	70-130			
1,1,2,2-Tetrachloroethane	21.6		µg/l		20.0	108	70-130			
Tetrachloroethene	20.5		µg/l		20.0	102	70-130			
Toluene	20.0		µg/l		20.0	100	70-130			
1,2,3-Trichlorobenzene	21.9		µg/l		20.0	110	70-130			
1,2,4-Trichlorobenzene	22.8		µg/l		20.0	114	70-130			
1,3,5-Trichlorobenzene	20.5		µg/l		20.0	102	70-130			
1,1,1-Trichloroethane	17.5		µg/l		20.0	88	70-130			
1,1,2-Trichloroethane	19.7		µg/l		20.0	98	70-130			
Trichloroethene	17.4		µg/l		20.0	87	70-130			
Trichlorofluoromethane (Freon 11)	19.0		µg/l		20.0	95	70-130			
1,2,3-Trichloropropane	18.7		µg/l		20.0	93	70-130			
1,2,4-Trimethylbenzene	21.1		µg/l		20.0	105	70-130			
1,3,5-Trimethylbenzene	21.3		µg/l		20.0	106	70-130			
Vinyl chloride	18.3		µg/l		20.0	91	70-130			
m,p-Xylene	46.4		µg/l		40.0	116	70-130			
o-Xylene	22.3		µg/l		20.0	112	70-130			
Tetrahydrofuran	20.1		µg/l		20.0	101	70-130			
Ethyl ether	18.7		µg/l		20.0	94	70-130			
Tert-amyl methyl ether	18.3		µg/l		20.0	92	70-130			
Ethyl tert-butyl ether	24.6		µg/l		20.0	123	70-130			
Di-isopropyl ether	20.7		µg/l		20.0	104	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330974 - SW846 5030 Water MS										
<u>LCS (1330974-BS1)</u>										
Tert-Butanol / butyl alcohol	210		µg/l		200	105	70-130			
1,4-Dioxane	211		µg/l		200	105	70-130			
trans-1,4-Dichloro-2-butene	18.3		µg/l		20.0	92	70-130			
Ethanol	405		µg/l		400	101	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	49.7		µg/l		50.0	99	70-130			
<u>Surrogate: Toluene-d8</u>										
	49.7		µg/l		50.0	99	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	47.0		µg/l		50.0	94	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	46.2		µg/l		50.0	92	70-130			
<u>LCS Dup (1330974-BSD1)</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	19.6		µg/l		20.0	98	70-130	7	20	
Acetone	21.0		µg/l		20.0	105	70-130	3	20	
Acrylonitrile	19.1		µg/l		20.0	96	70-130	4	20	
Benzene	20.4		µg/l		20.0	102	70-130	4	20	
Bromobenzene	18.9		µg/l		20.0	94	70-130	2	20	
Bromochloromethane	17.3		µg/l		20.0	87	70-130	3	20	
Bromodichloromethane	15.6		µg/l		20.0	78	70-130	0.9	20	
Bromoform	14.0		µg/l		20.0	70	70-130	2	20	
Bromomethane	20.8		µg/l		20.0	104	70-130	4	20	
2-Butanone (MEK)	23.5		µg/l		20.0	117	70-130	20	20	
n-Butylbenzene	21.1		µg/l		20.0	105	70-130	5	20	
sec-Butylbenzene	19.4		µg/l		20.0	97	70-130	8	20	
tert-Butylbenzene	19.6		µg/l		20.0	98	70-130	6	20	
Carbon disulfide	16.0		µg/l		20.0	80	70-130	8	20	
Carbon tetrachloride	15.5		µg/l		20.0	77	70-130	7	20	
Chlorobenzene	18.6		µg/l		20.0	93	70-130	5	20	
Chloroethane	19.3		µg/l		20.0	96	70-130	0.3	20	
Chloroform	18.5		µg/l		20.0	92	70-130	2	20	
Chloromethane	18.0		µg/l		20.0	90	70-130	7	20	
2-Chlorotoluene	20.3		µg/l		20.0	102	70-130	4	20	
4-Chlorotoluene	20.3		µg/l		20.0	101	70-130	7	20	
1,2-Dibromo-3-chloropropane	15.2		µg/l		20.0	76	70-130	6	20	
Dibromochloromethane	15.1		µg/l		20.0	76	70-130	4	20	
1,2-Dibromoethane (EDB)	19.3		µg/l		20.0	97	70-130	1	20	
Dibromomethane	19.3		µg/l		20.0	96	70-130	0.2	20	
1,2-Dichlorobenzene	20.5		µg/l		20.0	102	70-130	2	20	
1,3-Dichlorobenzene	19.7		µg/l		20.0	99	70-130	4	20	
1,4-Dichlorobenzene	18.2		µg/l		20.0	91	70-130	5	20	
Dichlorodifluoromethane (Freon12)	17.0		µg/l		20.0	85	70-130	5	20	
1,1-Dichloroethane	18.4		µg/l		20.0	92	70-130	4	20	
1,2-Dichloroethane	18.0		µg/l		20.0	90	70-130	2	20	
1,1-Dichloroethene	17.5		µg/l		20.0	87	70-130	9	20	
cis-1,2-Dichloroethene	18.6		µg/l		20.0	93	70-130	0.7	20	
trans-1,2-Dichloroethene	16.7		µg/l		20.0	83	70-130	7	20	
1,2-Dichloropropane	19.4		µg/l		20.0	97	70-130	0.5	20	
1,3-Dichloropropane	19.1		µg/l		20.0	95	70-130	1	20	
2,2-Dichloropropane	16.8		µg/l		20.0	84	70-130	8	20	
1,1-Dichloropropene	20.2		µg/l		20.0	101	70-130	4	20	
cis-1,3-Dichloropropene	16.9		µg/l		20.0	84	70-130	6	20	
trans-1,3-Dichloropropene	17.2		µg/l		20.0	86	70-130	4	20	
Ethylbenzene	21.2		µg/l		20.0	106	70-130	5	20	
Hexachlorobutadiene	19.3		µg/l		20.0	96	70-130	8	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330974 - SW846 5030 Water MS										
<u>LCS Dup (1330974-BSD1)</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
2-Hexanone (MBK)	20.2		µg/l		20.0	101	70-130	0.3	20	
Isopropylbenzene	20.6		µg/l		20.0	103	70-130	6	20	
4-Isopropyltoluene	23.0		µg/l		20.0	115	70-130	4	20	
Methyl tert-butyl ether	23.3		µg/l		20.0	117	70-130	2	20	
4-Methyl-2-pentanone (MIBK)	23.6		µg/l		20.0	118	70-130	3	20	
Methylene chloride	19.8		µg/l		20.0	99	70-130	0.05	20	
Naphthalene	23.0		µg/l		20.0	115	70-130	1	20	
n-Propylbenzene	19.9		µg/l		20.0	99	70-130	5	20	
Styrene	20.2		µg/l		20.0	101	70-130	2	20	
1,1,1,2-Tetrachloroethane	16.6		µg/l		20.0	83	70-130	3	20	
1,1,2,2-Tetrachloroethane	21.8		µg/l		20.0	109	70-130	1	20	
Tetrachloroethene	18.9		µg/l		20.0	94	70-130	8	20	
Toluene	19.3		µg/l		20.0	97	70-130	3	20	
1,2,3-Trichlorobenzene	20.9		µg/l		20.0	105	70-130	5	20	
1,2,4-Trichlorobenzene	22.2		µg/l		20.0	111	70-130	3	20	
1,3,5-Trichlorobenzene	20.4		µg/l		20.0	102	70-130	0.4	20	
1,1,1-Trichloroethane	16.7		µg/l		20.0	84	70-130	5	20	
1,1,2-Trichloroethane	19.5		µg/l		20.0	97	70-130	1	20	
Trichloroethene	17.6		µg/l		20.0	88	70-130	0.6	20	
Trichlorofluoromethane (Freon 11)	18.2		µg/l		20.0	91	70-130	5	20	
1,2,3-Trichloropropane	18.8		µg/l		20.0	94	70-130	0.9	20	
1,2,4-Trimethylbenzene	20.0		µg/l		20.0	100	70-130	5	20	
1,3,5-Trimethylbenzene	19.6		µg/l		20.0	98	70-130	8	20	
Vinyl chloride	17.8		µg/l		20.0	89	70-130	3	20	
m,p-Xylene	44.8		µg/l		40.0	112	70-130	3	20	
o-Xylene	21.1		µg/l		20.0	105	70-130	6	20	
Tetrahydrofuran	20.9		µg/l		20.0	104	70-130	4	20	
Ethyl ether	19.7		µg/l		20.0	99	70-130	5	20	
Tert-amyl methyl ether	18.4		µg/l		20.0	92	70-130	0.6	20	
Ethyl tert-butyl ether	24.4		µg/l		20.0	122	70-130	1	20	
Di-isopropyl ether	20.7		µg/l		20.0	103	70-130	0.3	20	
Tert-Butanol / butyl alcohol	206		µg/l		200	103	70-130	2	20	
1,4-Dioxane	210		µg/l		200	105	70-130	0.2	20	
trans-1,4-Dichloro-2-butene	17.7		µg/l		20.0	88	70-130	4	20	
Ethanol	403		µg/l		400	101	70-130	0.5	20	
Surrogate: 4-Bromofluorobenzene	49.2		µg/l		50.0	98	70-130			
Surrogate: Toluene-d8	50.2		µg/l		50.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	47.2		µg/l		50.0	94	70-130			
Surrogate: Dibromofluoromethane	46.9		µg/l		50.0	94	70-130			
<u>Matrix Spike (1330974-MS1)</u>										
<u>Source: SB82439-03</u>										
<u>Prepared & Analyzed: 26-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	22.0	D	µg/l		20.0	BRL	110	70-130		
Acetone	23.8	D	µg/l		20.0	7.58	81	70-130		
Acrylonitrile	17.6	D	µg/l		20.0	BRL	88	70-130		
Benzene	21.0	D	µg/l		20.0	BRL	105	70-130		
Bromobenzene	19.7	D	µg/l		20.0	BRL	98	70-130		
Bromoform	17.5	D	µg/l		20.0	BRL	88	70-130		
Bromochloromethane	14.8	D	µg/l		20.0	BRL	74	70-130		
Bromodichloromethane	12.7	QM7, D	µg/l		20.0	BRL	64	70-130		
Bromomethane	23.3	D	µg/l		20.0	BRL	116	70-130		
2-Butanone (MEK)	21.0	D	µg/l		20.0	BRL	105	70-130		
n-Butylbenzene	21.4	D	µg/l		20.0	BRL	107	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330974 - SW846 5030 Water MS													
<u>Matrix Spike (1330974-MS1)</u>													
					<u>Source: SB82439-03</u>	Prepared & Analyzed: 26-Dec-13							
sec-Butylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130					
tert-Butylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130					
Carbon disulfide	14.9	D	µg/l		20.0	BRL	74	70-130					
Carbon tetrachloride	15.5	D	µg/l		20.0	BRL	78	70-130					
Chlorobenzene	19.5	D	µg/l		20.0	BRL	98	70-130					
Chloroethane	21.1	D	µg/l		20.0	BRL	106	70-130					
Chloroform	18.9	D	µg/l		20.0	BRL	94	70-130					
Chloromethane	18.4	D	µg/l		20.0	BRL	92	70-130					
2-Chlorotoluene	22.1	D	µg/l		20.0	BRL	110	70-130					
4-Chlorotoluene	22.4	D	µg/l		20.0	BRL	112	70-130					
1,2-Dibromo-3-chloropropane	12.0	QM7, D	µg/l		20.0	BRL	60	70-130					
Dibromochloromethane	14.1	D	µg/l		20.0	BRL	71	70-130					
1,2-Dibromoethane (EDB)	18.8	D	µg/l		20.0	BRL	94	70-130					
Dibromomethane	19.1	D	µg/l		20.0	BRL	95	70-130					
1,2-Dichlorobenzene	20.3	D	µg/l		20.0	BRL	102	70-130					
1,3-Dichlorobenzene	20.9	D	µg/l		20.0	BRL	105	70-130					
1,4-Dichlorobenzene	18.5	D	µg/l		20.0	BRL	93	70-130					
Dichlorodifluoromethane (Freon12)	16.4	D	µg/l		20.0	BRL	82	70-130					
1,1-Dichloroethane	18.9	D	µg/l		20.0	BRL	94	70-130					
1,2-Dichloroethane	18.8	D	µg/l		20.0	BRL	94	70-130					
1,1-Dichloroethene	18.7	D	µg/l		20.0	BRL	93	70-130					
cis-1,2-Dichloroethene	19.1	D	µg/l		20.0	BRL	96	70-130					
trans-1,2-Dichloroethene	18.0	D	µg/l		20.0	BRL	90	70-130					
1,2-Dichloropropane	19.5	D	µg/l		20.0	BRL	97	70-130					
1,3-Dichloropropane	18.8	D	µg/l		20.0	BRL	94	70-130					
2,2-Dichloropropane	16.5	D	µg/l		20.0	BRL	82	70-130					
1,1-Dichloropropene	21.7	D	µg/l		20.0	BRL	109	70-130					
cis-1,3-Dichloropropene	15.7	D	µg/l		20.0	BRL	78	70-130					
trans-1,3-Dichloropropene	16.6	D	µg/l		20.0	BRL	83	70-130					
Ethylbenzene	22.7	D	µg/l		20.0	BRL	113	70-130					
Hexachlorobutadiene	19.4	D	µg/l		20.0	BRL	97	70-130					
2-Hexanone (MBK)	20.0	D	µg/l		20.0	BRL	100	70-130					
Isopropylbenzene	22.7	D	µg/l		20.0	BRL	113	70-130					
4-Isopropyltoluene	23.8	D	µg/l		20.0	BRL	119	70-130					
Methyl tert-butyl ether	20.6	D	µg/l		20.0	BRL	103	70-130					
4-Methyl-2-pentanone (MIBK)	19.4	D	µg/l		20.0	BRL	97	70-130					
Methylene chloride	20.3	D	µg/l		20.0	BRL	102	70-130					
Naphthalene	20.3	D	µg/l		20.0	BRL	102	70-130					
n-Propylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130					
Styrene	20.9	D	µg/l		20.0	BRL	104	70-130					
1,1,1,2-Tetrachloroethane	15.9	D	µg/l		20.0	BRL	80	70-130					
1,1,2,2-Tetrachloroethane	21.4	D	µg/l		20.0	BRL	107	70-130					
Tetrachloroethene	20.4	D	µg/l		20.0	BRL	102	70-130					
Toluene	20.4	D	µg/l		20.0	BRL	102	70-130					
1,2,3-Trichlorobenzene	20.4	D	µg/l		20.0	BRL	102	70-130					
1,2,4-Trichlorobenzene	21.5	D	µg/l		20.0	BRL	108	70-130					
1,3,5-Trichlorobenzene	20.2	D	µg/l		20.0	BRL	101	70-130					
1,1,1-Trichloroethane	17.1	D	µg/l		20.0	BRL	85	70-130					
1,1,2-Trichloroethane	19.0	D	µg/l		20.0	BRL	95	70-130					
Trichloroethene	18.3	D	µg/l		20.0	BRL	91	70-130					
Trichlorofluoromethane (Freon 11)	18.9	D	µg/l		20.0	BRL	94	70-130					
1,2,3-Trichloropropane	18.6	D	µg/l		20.0	BRL	93	70-130					

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330974 - SW846 5030 Water MS													
Matrix Spike (1330974-MS1)													
					Source: SB82439-03	Prepared & Analyzed: 26-Dec-13							
1,2,4-Trimethylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130					
1,3,5-Trimethylbenzene	21.3	D	µg/l		20.0	BRL	107	70-130					
Vinyl chloride	20.8	D	µg/l		20.0	BRL	104	70-130					
m,p-Xylene	47.6	D	µg/l		40.0	BRL	119	70-130					
o-Xylene	22.6	D	µg/l		20.0	BRL	113	70-130					
Tetrahydrofuran	18.4	D	µg/l		20.0	BRL	92	70-130					
Ethyl ether	18.0	D	µg/l		20.0	BRL	90	70-130					
Tert-amyl methyl ether	19.5	D	µg/l		20.0	BRL	98	70-130					
Ethyl tert-butyl ether	21.6	D	µg/l		20.0	BRL	108	70-130					
Di-isopropyl ether	20.0	D	µg/l		20.0	BRL	100	70-130					
Tert-Butanol / butyl alcohol	184	D	µg/l		200	BRL	92	70-130					
1,4-Dioxane	206	D	µg/l		200	BRL	103	70-130					
trans-1,4-Dichloro-2-butene	16.8	D	µg/l		20.0	BRL	84	70-130					
Ethanol	388	D	µg/l		400	BRL	97	70-130					
Surrogate: 4-Bromofluorobenzene	50.7		µg/l		50.0		101	70-130					
Surrogate: Toluene-d8	49.6		µg/l		50.0		99	70-130					
Surrogate: 1,2-Dichloroethane-d4	47.4		µg/l		50.0		95	70-130					
Surrogate: Dibromofluoromethane	45.7		µg/l		50.0		91	70-130					
Matrix Spike Dup (1330974-MSD1)													
					Source: SB82439-03	Prepared & Analyzed: 26-Dec-13							
1,1,2-Trichlorotrifluoroethane (Freon 113)	21.2	D	µg/l		20.0	BRL	106	70-130	4	20			
Acetone	23.0	D	µg/l		20.0	7.58	77	70-130	5	20			
Acrylonitrile	16.8	D	µg/l		20.0	BRL	84	70-130	5	20			
Benzene	20.7	D	µg/l		20.0	BRL	103	70-130	1	20			
Bromobenzene	19.4	D	µg/l		20.0	BRL	97	70-130	2	20			
Bromoform	11.9	QM7, D	µg/l		20.0	BRL	60	70-130	6	20			
Bromochloromethane	16.7	D	µg/l		20.0	BRL	84	70-130	5	20			
Bromodichloromethane	14.5	D	µg/l		20.0	BRL	72	70-130	2	20			
Bromoform	22.5	D	µg/l		20.0	BRL	113	70-130	3	20			
2-Butanone (MEK)	18.6	D	µg/l		20.0	BRL	93	70-130	12	20			
n-Butylbenzene	22.3	D	µg/l		20.0	BRL	112	70-130	4	20			
sec-Butylbenzene	20.9	D	µg/l		20.0	BRL	104	70-130	2	20			
tert-Butylbenzene	20.7	D	µg/l		20.0	BRL	104	70-130	3	20			
Carbon disulfide	14.8	D	µg/l		20.0	BRL	74	70-130	0.5	20			
Chlorobenzene	15.1	D	µg/l		20.0	BRL	75	70-130	3	20			
Chloroethane	19.3	D	µg/l		20.0	BRL	97	70-130	1	20			
Chloroform	20.3	D	µg/l		20.0	BRL	101	70-130	4	20			
Chloromethane	18.4	D	µg/l		20.0	BRL	92	70-130	3	20			
2-Chlorotoluene	17.0	D	µg/l		20.0	BRL	85	70-130	8	20			
4-Chlorotoluene	21.6	D	µg/l		20.0	BRL	108	70-130	2	20			
1,2-Dibromo-3-chloropropane	21.5	D	µg/l		20.0	BRL	108	70-130	4	20			
Dibromochloromethane	12.2	QM7, D	µg/l		20.0	BRL	61	70-130	2	20			
1,2-Dibromoethane (EDB)	13.7	QM7, D	µg/l		20.0	BRL	68	70-130	3	20			
Dibromomethane	18.4	D	µg/l		20.0	BRL	92	70-130	5	20			
1,2-Dichlorobenzene	18.4	D	µg/l		20.0	BRL	102	70-130	0.6	20			
1,3-Dichlorobenzene	20.7	D	µg/l		20.0	BRL	104	70-130	0.9	20			
1,4-Dichlorobenzene	18.5	D	µg/l		20.0	BRL	92	70-130	0.2	20			
Dichlorodifluoromethane (Freon12)	16.0	D	µg/l		20.0	BRL	80	70-130	2	20			
1,1-Dichloroethane	17.6	D	µg/l		20.0	BRL	88	70-130	7	20			
1,2-Dichloroethane	18.1	D	µg/l		20.0	BRL	90	70-130	4	20			
1,1-Dichloroethene	18.1	D	µg/l		20.0	BRL	91	70-130	3	20			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1330974 - SW846 5030 Water MS													
<u>Matrix Spike Dup (1330974-MSD1)</u>													
					<u>Source: SB82439-03</u>	Prepared & Analyzed: 26-Dec-13							
cis-1,2-Dichloroethene	18.7	D	µg/l		20.0	BRL	94	70-130	2	20			
trans-1,2-Dichloroethene	17.2	D	µg/l		20.0	BRL	86	70-130	4	20			
1,2-Dichloropropane	18.6	D	µg/l		20.0	BRL	93	70-130	5	20			
1,3-Dichloropropane	18.5	D	µg/l		20.0	BRL	93	70-130	2	20			
2,2-Dichloropropane	16.1	D	µg/l		20.0	BRL	80	70-130	3	20			
1,1-Dichloropropene	20.6	D	µg/l		20.0	BRL	103	70-130	5	20			
cis-1,3-Dichloropropene	16.2	D	µg/l		20.0	BRL	81	70-130	3	20			
trans-1,3-Dichloropropene	15.6	D	µg/l		20.0	BRL	78	70-130	6	20			
Ethylbenzene	22.3	D	µg/l		20.0	BRL	112	70-130	2	20			
Hexachlorobutadiene	19.9	D	µg/l		20.0	BRL	99	70-130	2	20			
2-Hexanone (MBK)	17.1	D	µg/l		20.0	BRL	85	70-130	16	20			
Isopropylbenzene	21.5	D	µg/l		20.0	BRL	108	70-130	5	20			
4-Isopropyltoluene	23.3	D	µg/l		20.0	BRL	117	70-130	2	20			
Methyl tert-butyl ether	20.7	D	µg/l		20.0	BRL	103	70-130	0.4	20			
4-Methyl-2-pentanone (MIBK)	19.9	D	µg/l		20.0	BRL	100	70-130	3	20			
Methylene chloride	19.4	D	µg/l		20.0	BRL	97	70-130	5	20			
Naphthalene	21.2	D	µg/l		20.0	BRL	106	70-130	4	20			
n-Propylbenzene	20.8	D	µg/l		20.0	BRL	104	70-130	2	20			
Styrene	20.2	D	µg/l		20.0	BRL	101	70-130	3	20			
1,1,1,2-Tetrachloroethane	15.9	D	µg/l		20.0	BRL	80	70-130	0.1	20			
1,1,2,2-Tetrachloroethane	21.1	D	µg/l		20.0	BRL	105	70-130	2	20			
Tetrachloroethene	20.0	D	µg/l		20.0	BRL	100	70-130	2	20			
Toluene	20.0	D	µg/l		20.0	BRL	100	70-130	2	20			
1,2,3-Trichlorobenzene	20.9	D	µg/l		20.0	BRL	105	70-130	2	20			
1,2,4-Trichlorobenzene	22.8	D	µg/l		20.0	BRL	114	70-130	6	20			
1,3,5-Trichlorobenzene	20.8	D	µg/l		20.0	BRL	104	70-130	3	20			
1,1,1-Trichloroethane	16.3	D	µg/l		20.0	BRL	81	70-130	5	20			
1,1,2-Trichloroethane	18.6	D	µg/l		20.0	BRL	93	70-130	2	20			
Trichloroethene	17.8	D	µg/l		20.0	BRL	89	70-130	3	20			
Trichlorofluoromethane (Freon 11)	18.4	D	µg/l		20.0	BRL	92	70-130	3	20			
1,2,3-Trichloropropane	18.5	D	µg/l		20.0	BRL	92	70-130	0.9	20			
1,2,4-Trimethylbenzene	21.0	D	µg/l		20.0	BRL	105	70-130	1	20			
1,3,5-Trimethylbenzene	21.3	D	µg/l		20.0	BRL	106	70-130	0.3	20			
Vinyl chloride	19.2	D	µg/l		20.0	BRL	96	70-130	8	20			
m,p-Xylene	45.9	D	µg/l		40.0	BRL	115	70-130	3	20			
o-Xylene	22.2	D	µg/l		20.0	BRL	111	70-130	2	20			
Tetrahydrofuran	19.1	D	µg/l		20.0	BRL	96	70-130	4	20			
Ethyl ether	17.8	D	µg/l		20.0	BRL	89	70-130	0.8	20			
Tert-amyl methyl ether	19.1	D	µg/l		20.0	BRL	96	70-130	2	20			
Ethyl tert-butyl ether	21.8	D	µg/l		20.0	BRL	109	70-130	0.8	20			
Di-isopropyl ether	19.8	D	µg/l		20.0	BRL	99	70-130	1	20			
Tert-Butanol / butyl alcohol	174	D	µg/l		200	BRL	87	70-130	5	20			
1,4-Dioxane	177	D	µg/l		200	BRL	89	70-130	15	20			
trans-1,4-Dichloro-2-butene	18.3	D	µg/l		20.0	BRL	91	70-130	8	20			
Ethanol	364	D	µg/l		400	BRL	91	70-130	6	20			
Surrogate: 4-Bromofluorobenzene	50.2		µg/l		50.0		100	70-130					
Surrogate: Toluene-d8	49.5		µg/l		50.0		99	70-130					
Surrogate: 1,2-Dichloroethane-d4	46.9		µg/l		50.0		94	70-130					
Surrogate: Dibromofluoromethane	45.6		µg/l		50.0		91	70-130					

Batch 1331210 - SW846 5030 Water MS

Blank (1331210-BLK1)

Prepared & Analyzed: 30-Dec-13

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331210 - SW846 5030 Water MS										
<u>Blank (1331210-BLK1)</u>										
<u>Prepared & Analyzed: 30-Dec-13</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromochloromethane	< 1.00		µg/l	1.00						
Bromodichloromethane	< 0.50		µg/l	0.50						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331210 - SW846 5030 Water MS										
<u>Blank (1331210-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	46.5		µg/l	50.0		93		70-130		
Surrogate: Toluene-d8	53.4		µg/l	50.0		107		70-130		
Surrogate: 1,2-Dichloroethane-d4	57.2		µg/l	50.0		114		70-130		
Surrogate: Dibromofluoromethane	56.0		µg/l	50.0		112		70-130		
<u>LCS (1331210-BS1)</u>										
Prepared & Analyzed: 30-Dec-13										
1,1,2-Trichlorotrifluoroethane (Freon 113)	23.9		µg/l	20.0		120		70-130		
Acetone	25.5		µg/l	20.0		127		70-130		
Acrylonitrile	23.8		µg/l	20.0		119		70-130		
Benzene	19.8		µg/l	20.0		99		70-130		
Bromobenzene	19.7		µg/l	20.0		98		70-130		
Bromoform	23.7		µg/l	20.0		118		70-130		
Bromochloromethane	23.0		µg/l	20.0		115		70-130		
Bromodichloromethane	18.8		µg/l	20.0		94		70-130		
Bromoform	22.1		µg/l	20.0		111		70-130		
2-Butanone (MEK)	23.4		µg/l	20.0		117		70-130		
n-Butylbenzene	21.3		µg/l	20.0		106		70-130		
sec-Butylbenzene	19.0		µg/l	20.0		95		70-130		
tert-Butylbenzene	18.4		µg/l	20.0		92		70-130		
Carbon disulfide	18.2		µg/l	20.0		91		70-130		
Carbon tetrachloride	14.6		µg/l	20.0		73		70-130		
Chlorobenzene	19.6		µg/l	20.0		98		70-130		
Chloroethane	23.2		µg/l	20.0		116		70-130		
Chloroform	21.0		µg/l	20.0		105		70-130		
Chloromethane	23.8		µg/l	20.0		119		70-130		
2-Chlorotoluene	21.3		µg/l	20.0		106		70-130		
4-Chlorotoluene	22.8		µg/l	20.0		114		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331210 - SW846 5030 Water MS										
<u>LCS (1331210-BS1)</u>										
<u>Prepared & Analyzed: 30-Dec-13</u>										
1,2-Dibromo-3-chloropropane	18.7		µg/l		20.0	94	70-130			
Dibromochloromethane	21.3		µg/l		20.0	107	70-130			
1,2-Dibromoethane (EDB)	21.7		µg/l		20.0	108	70-130			
Dibromomethane	21.4		µg/l		20.0	107	70-130			
1,2-Dichlorobenzene	21.4		µg/l		20.0	107	70-130			
1,3-Dichlorobenzene	20.4		µg/l		20.0	102	70-130			
1,4-Dichlorobenzene	20.6		µg/l		20.0	103	70-130			
Dichlorodifluoromethane (Freon12)	24.1		µg/l		20.0	120	70-130			
1,1-Dichloroethane	22.6		µg/l		20.0	113	70-130			
1,2-Dichloroethane	22.8		µg/l		20.0	114	70-130			
1,1-Dichloroethene	23.5		µg/l		20.0	117	70-130			
cis-1,2-Dichloroethene	23.2		µg/l		20.0	116	70-130			
trans-1,2-Dichloroethene	23.0		µg/l		20.0	115	70-130			
1,2-Dichloropropane	23.9		µg/l		20.0	119	70-130			
1,3-Dichloropropane	23.9		µg/l		20.0	120	70-130			
2,2-Dichloropropane	18.5		µg/l		20.0	93	70-130			
1,1-Dichloropropene	17.0		µg/l		20.0	85	70-130			
cis-1,3-Dichloropropene	21.4		µg/l		20.0	107	70-130			
trans-1,3-Dichloropropene	21.0		µg/l		20.0	105	70-130			
Ethylbenzene	19.6		µg/l		20.0	98	70-130			
Hexachlorobutadiene	17.8		µg/l		20.0	89	70-130			
2-Hexanone (MBK)	19.7		µg/l		20.0	98	70-130			
Isopropylbenzene	21.7		µg/l		20.0	108	70-130			
4-Isopropyltoluene	18.7		µg/l		20.0	94	70-130			
Methyl tert-butyl ether	20.4		µg/l		20.0	102	70-130			
4-Methyl-2-pentanone (MIBK)	20.2		µg/l		20.0	101	70-130			
Methylene chloride	21.5		µg/l		20.0	108	70-130			
Naphthalene	19.6		µg/l		20.0	98	70-130			
n-Propylbenzene	19.8		µg/l		20.0	99	70-130			
Styrene	18.1		µg/l		20.0	90	70-130			
1,1,1,2-Tetrachloroethane	18.2		µg/l		20.0	91	70-130			
1,1,2,2-Tetrachloroethane	24.2		µg/l		20.0	121	70-130			
Tetrachloroethene	21.0		µg/l		20.0	105	70-130			
Toluene	22.9		µg/l		20.0	114	70-130			
1,2,3-Trichlorobenzene	18.8		µg/l		20.0	94	70-130			
1,2,4-Trichlorobenzene	18.3		µg/l		20.0	91	70-130			
1,3,5-Trichlorobenzene	18.2		µg/l		20.0	91	70-130			
1,1,1-Trichloroethane	17.1		µg/l		20.0	86	70-130			
1,1,2-Trichloroethane	22.2		µg/l		20.0	111	70-130			
Trichloroethene	22.1		µg/l		20.0	110	70-130			
Trichlorofluoromethane (Freon 11)	23.0		µg/l		20.0	115	70-130			
1,2,3-Trichloropropane	22.1		µg/l		20.0	110	70-130			
1,2,4-Trimethylbenzene	19.4		µg/l		20.0	97	70-130			
1,3,5-Trimethylbenzene	19.1		µg/l		20.0	96	70-130			
Vinyl chloride	21.3		µg/l		20.0	106	70-130			
m,p-Xylene	38.2		µg/l		40.0	96	70-130			
o-Xylene	19.2		µg/l		20.0	96	70-130			
Tetrahydrofuran	23.3		µg/l		20.0	117	70-130			
Ethyl ether	24.2		µg/l		20.0	121	70-130			
Tert-amyl methyl ether	22.3		µg/l		20.0	111	70-130			
Ethyl tert-butyl ether	19.6		µg/l		20.0	98	70-130			
Di-isopropyl ether	22.7		µg/l		20.0	114	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331210 - SW846 5030 Water MS										
<u>LCS (1331210-BS1)</u>										
Tert-Butanol / butyl alcohol	211		µg/l		200	105	70-130			
1,4-Dioxane	241		µg/l		200	121	70-130			
trans-1,4-Dichloro-2-butene	17.5		µg/l		20.0	88	70-130			
Ethanol	520		µg/l		400	130	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	50.0		µg/l		50.0	100	70-130			
<u>Surrogate: Toluene-d8</u>										
	54.4		µg/l		50.0	109	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	55.8		µg/l		50.0	112	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	56.5		µg/l		50.0	113	70-130			
<u>LCS Dup (1331210-BSD1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	20.2		µg/l		20.0	101	70-130	17	20	
Acetone	30.4		µg/l		20.0	152	70-130	17	20	
Acrylonitrile	23.4		µg/l		20.0	117	70-130	2	20	
Benzene	18.4		µg/l		20.0	92	70-130	7	20	
Bromobenzene	19.1		µg/l		20.0	96	70-130	3	20	
Bromochloromethane	23.1		µg/l		20.0	116	70-130	2	20	
Bromodichloromethane	21.6		µg/l		20.0	108	70-130	7	20	
Bromoform	18.8		µg/l		20.0	94	70-130	0.4	20	
Bromomethane	21.1		µg/l		20.0	105	70-130	5	20	
2-Butanone (MEK)	21.6		µg/l		20.0	108	70-130	8	20	
n-Butylbenzene	20.2		µg/l		20.0	101	70-130	5	20	
sec-Butylbenzene	18.5		µg/l		20.0	93	70-130	3	20	
tert-Butylbenzene	17.7		µg/l		20.0	88	70-130	4	20	
Carbon disulfide	17.3		µg/l		20.0	87	70-130	5	20	
Carbon tetrachloride	13.3	QM9	µg/l		20.0	66	70-130	9	20	
Chlorobenzene	19.5		µg/l		20.0	97	70-130	0.8	20	
Chloroethane	21.0		µg/l		20.0	105	70-130	10	20	
Chloroform	19.6		µg/l		20.0	98	70-130	7	20	
Chloromethane	21.9		µg/l		20.0	110	70-130	8	20	
2-Chlorotoluene	20.4		µg/l		20.0	102	70-130	4	20	
4-Chlorotoluene	21.8		µg/l		20.0	109	70-130	4	20	
1,2-Dibromo-3-chloropropane	19.4		µg/l		20.0	97	70-130	4	20	
Dibromochloromethane	20.9		µg/l		20.0	104	70-130	2	20	
1,2-Dibromoethane (EDB)	21.1		µg/l		20.0	105	70-130	3	20	
Dibromomethane	21.3		µg/l		20.0	106	70-130	0.7	20	
1,2-Dichlorobenzene	20.3		µg/l		20.0	102	70-130	5	20	
1,3-Dichlorobenzene	20.3		µg/l		20.0	101	70-130	0.5	20	
1,4-Dichlorobenzene	20.1		µg/l		20.0	101	70-130	2	20	
Dichlorodifluoromethane (Freon12)	21.3		µg/l		20.0	106	70-130	12	20	
1,1-Dichloroethane	21.0		µg/l		20.0	105	70-130	7	20	
1,2-Dichloroethane	21.8		µg/l		20.0	109	70-130	4	20	
1,1-Dichloroethene	21.3		µg/l		20.0	107	70-130	10	20	
cis-1,2-Dichloroethene	21.6		µg/l		20.0	108	70-130	7	20	
trans-1,2-Dichloroethene	21.2		µg/l		20.0	106	70-130	8	20	
1,2-Dichloropropane	22.5		µg/l		20.0	112	70-130	6	20	
1,3-Dichloropropane	22.9		µg/l		20.0	114	70-130	5	20	
2,2-Dichloropropane	17.1		µg/l		20.0	85	70-130	8	20	
1,1-Dichloropropene	16.1		µg/l		20.0	81	70-130	6	20	
cis-1,3-Dichloropropene	20.8		µg/l		20.0	104	70-130	3	20	
trans-1,3-Dichloropropene	20.3		µg/l		20.0	101	70-130	4	20	
Ethylbenzene	18.8		µg/l		20.0	94	70-130	4	20	
Hexachlorobutadiene	16.8		µg/l		20.0	84	70-130	6	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331210 - SW846 5030 Water MS										
<u>LCS Dup (1331210-BSD1)</u>										
<u>Prepared & Analyzed: 30-Dec-13</u>										
2-Hexanone (MBK)	19.6		µg/l		20.0	98	70-130	0.2	20	
Isopropylbenzene	20.7		µg/l		20.0	103	70-130	5	20	
4-Isopropyltoluene	17.8		µg/l		20.0	89	70-130	5	20	
Methyl tert-butyl ether	20.5		µg/l		20.0	102	70-130	0.2	20	
4-Methyl-2-pentanone (MIBK)	20.2		µg/l		20.0	101	70-130	0.05	20	
Methylene chloride	20.2		µg/l		20.0	101	70-130	6	20	
Naphthalene	19.6		µg/l		20.0	98	70-130	0	20	
n-Propylbenzene	19.3		µg/l		20.0	96	70-130	3	20	
Styrene	17.7		µg/l		20.0	89	70-130	2	20	
1,1,1,2-Tetrachloroethane	18.0		µg/l		20.0	90	70-130	1	20	
1,1,2,2-Tetrachloroethane	23.8		µg/l		20.0	119	70-130	2	20	
Tetrachloroethene	19.6		µg/l		20.0	98	70-130	7	20	
Toluene	21.8		µg/l		20.0	109	70-130	5	20	
1,2,3-Trichlorobenzene	18.1		µg/l		20.0	90	70-130	4	20	
1,2,4-Trichlorobenzene	17.1		µg/l		20.0	85	70-130	7	20	
1,3,5-Trichlorobenzene	17.8		µg/l		20.0	89	70-130	2	20	
1,1,1-Trichloroethane	18.5		µg/l		20.0	92	70-130	8	20	
1,1,2-Trichloroethane	21.4		µg/l		20.0	107	70-130	3	20	
Trichloroethene	20.8		µg/l		20.0	104	70-130	6	20	
Trichlorofluoromethane (Freon 11)	21.5		µg/l		20.0	107	70-130	7	20	
1,2,3-Trichloropropane	22.4		µg/l		20.0	112	70-130	2	20	
1,2,4-Trimethylbenzene	18.8		µg/l		20.0	94	70-130	3	20	
1,3,5-Trimethylbenzene	18.2		µg/l		20.0	91	70-130	5	20	
Vinyl chloride	20.0		µg/l		20.0	100	70-130	6	20	
m,p-Xylene	36.9		µg/l		40.0	92	70-130	3	20	
o-Xylene	18.7		µg/l		20.0	94	70-130	2	20	
Tetrahydrofuran	22.7		µg/l		20.0	113	70-130	3	20	
Ethyl ether	23.3		µg/l		20.0	117	70-130	4	20	
Tert-amyl methyl ether	20.9		µg/l		20.0	105	70-130	6	20	
Ethyl tert-butyl ether	18.8		µg/l		20.0	94	70-130	5	20	
Di-isopropyl ether	21.5		µg/l		20.0	107	70-130	6	20	
Tert-Butanol / butyl alcohol	224		µg/l		200	112	70-130	6	20	
1,4-Dioxane	188	QR5	µg/l		200	94	70-130	25	20	
trans-1,4-Dichloro-2-butene	17.7		µg/l		20.0	88	70-130	0.9	20	
Ethanol	493		µg/l		400	123	70-130	5	20	
Surrogate: 4-Bromofluorobenzene	50.7		µg/l		50.0	101	70-130			
Surrogate: Toluene-d8	53.5		µg/l		50.0	107	70-130			
Surrogate: 1,2-Dichloroethane-d4	53.2		µg/l		50.0	106	70-130			
Surrogate: Dibromofluoromethane	54.6		µg/l		50.0	109	70-130			
Batch 1400027 - SW846 5030 Water MS										
<u>Blank (1400027-BLK1)</u>										
<u>Prepared & Analyzed: 02-Jan-14</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l		1.00					
Acetone	< 10.0		µg/l		10.0					
Acrylonitrile	< 0.50		µg/l		0.50					
Benzene	< 1.00		µg/l		1.00					
Bromobenzene	< 1.00		µg/l		1.00					
Bromochloromethane	< 1.00		µg/l		1.00					
Bromodichloromethane	< 0.50		µg/l		0.50					
Bromoform	< 1.00		µg/l		1.00					
Bromomethane	< 2.00		µg/l		2.00					
2-Butanone (MEK)	< 10.0		µg/l		10.0					

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>Blank (1400027-BLK1)</u>										
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>Blank (1400027-BLK1)</u>										
1,2,3-Trichloropropane	< 1.00		µg/l	1.00					Prepared & Analyzed: 02-Jan-14	
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
<u>Surrogate: 4-Bromofluorobenzene</u>										
Surrogate: Toluene-d8	27.4		µg/l		30.0		91	70-130		
Surrogate: 1,2-Dichloroethane-d4	30.0		µg/l		30.0		100	70-130		
Surrogate: Dibromofluoromethane	36.0		µg/l		30.0		120	70-130		
Surrogate: 4-Bromofluorobenzene	38.9		µg/l		30.0		130	70-130		
<u>LCS (1400027-BS1)</u>										
Prepared & Analyzed: 02-Jan-14										
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.6		µg/l		20.0		123	70-130		
Acetone	23.0		µg/l		20.0		115	70-130		
Acrylonitrile	22.1		µg/l		20.0		110	70-130		
Benzene	21.5		µg/l		20.0		107	70-130		
Bromobenzene	20.2		µg/l		20.0		101	70-130		
Bromoform	23.8		µg/l		20.0		119	70-130		
Bromochloromethane	25.4		µg/l		20.0		127	70-130		
Bromodichloromethane	25.0		µg/l		20.0		125	70-130		
Bromoform	25.5		µg/l		20.0		128	70-130		
2-Butanone (MEK)	23.6		µg/l		20.0		118	70-130		
n-Butylbenzene	20.3		µg/l		20.0		102	70-130		
sec-Butylbenzene	20.9		µg/l		20.0		104	70-130		
tert-Butylbenzene	20.5		µg/l		20.0		102	70-130		
Carbon disulfide	25.1		µg/l		20.0		126	70-130		
Carbon tetrachloride	26.5	QC2	µg/l		20.0		132	70-130		
Chlorobenzene	19.7		µg/l		20.0		98	70-130		
Chloroethane	23.5		µg/l		20.0		118	70-130		
Chloroform	22.9		µg/l		20.0		114	70-130		
Chloromethane	22.4		µg/l		20.0		112	70-130		
2-Chlorotoluene	23.5		µg/l		20.0		117	70-130		
4-Chlorotoluene	22.6		µg/l		20.0		113	70-130		
1,2-Dibromo-3-chloropropane	27.5	QM9	µg/l		20.0		137	70-130		
Dibromochloromethane	24.9		µg/l		20.0		124	70-130		
1,2-Dibromoethane (EDB)	22.1		µg/l		20.0		110	70-130		
Dibromomethane	22.8		µg/l		20.0		114	70-130		
1,2-Dichlorobenzene	21.3		µg/l		20.0		106	70-130		
1,3-Dichlorobenzene	20.7		µg/l		20.0		104	70-130		
1,4-Dichlorobenzene	20.0		µg/l		20.0		100	70-130		
Dichlorodifluoromethane (Freon12)	21.4		µg/l		20.0		107	70-130		
1,1-Dichloroethane	23.6		µg/l		20.0		118	70-130		
1,2-Dichloroethane	22.7		µg/l		20.0		113	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>LCS (1400027-BS1)</u>										
<u>Prepared & Analyzed: 02-Jan-14</u>										
1,1-Dichloroethene	24.6		µg/l		20.0	123	70-130			
cis-1,2-Dichloroethene	22.9		µg/l		20.0	114	70-130			
trans-1,2-Dichloroethene	23.6		µg/l		20.0	118	70-130			
1,2-Dichloropropane	22.1		µg/l		20.0	110	70-130			
1,3-Dichloropropane	21.9		µg/l		20.0	110	70-130			
2,2-Dichloropropane	28.4	QC2	µg/l		20.0	142	70-130			
1,1-Dichloropropene	21.6		µg/l		20.0	108	70-130			
cis-1,3-Dichloropropene	23.6		µg/l		20.0	118	70-130			
trans-1,3-Dichloropropene	25.5		µg/l		20.0	128	70-130			
Ethylbenzene	21.7		µg/l		20.0	109	70-130			
Hexachlorobutadiene	21.4		µg/l		20.0	107	70-130			
2-Hexanone (MBK)	21.5		µg/l		20.0	108	70-130			
Isopropylbenzene	21.5		µg/l		20.0	107	70-130			
4-Isopropyltoluene	22.1		µg/l		20.0	110	70-130			
Methyl tert-butyl ether	24.4		µg/l		20.0	122	70-130			
4-Methyl-2-pentanone (MIBK)	20.8		µg/l		20.0	104	70-130			
Methylene chloride	23.7		µg/l		20.0	118	70-130			
Naphthalene	17.6		µg/l		20.0	88	70-130			
n-Propylbenzene	20.4		µg/l		20.0	102	70-130			
Styrene	22.1		µg/l		20.0	111	70-130			
1,1,1,2-Tetrachloroethane	22.9		µg/l		20.0	115	70-130			
1,1,2,2-Tetrachloroethane	24.0		µg/l		20.0	120	70-130			
Tetrachloroethene	21.4		µg/l		20.0	107	70-130			
Toluene	21.3		µg/l		20.0	107	70-130			
1,2,3-Trichlorobenzene	19.6		µg/l		20.0	98	70-130			
1,2,4-Trichlorobenzene	18.7		µg/l		20.0	94	70-130			
1,3,5-Trichlorobenzene	19.3		µg/l		20.0	97	70-130			
1,1,1-Trichloroethane	25.8		µg/l		20.0	129	70-130			
1,1,2-Trichloroethane	22.2		µg/l		20.0	111	70-130			
Trichloroethene	21.4		µg/l		20.0	107	70-130			
Trichlorofluoromethane (Freon 11)	24.2		µg/l		20.0	121	70-130			
1,2,3-Trichloropropane	21.5		µg/l		20.0	107	70-130			
1,2,4-Trimethylbenzene	20.4		µg/l		20.0	102	70-130			
1,3,5-Trimethylbenzene	20.8		µg/l		20.0	104	70-130			
Vinyl chloride	25.8		µg/l		20.0	129	70-130			
m,p-Xylene	42.8		µg/l		40.0	107	70-130			
o-Xylene	22.8		µg/l		20.0	114	70-130			
Tetrahydrofuran	21.9		µg/l		20.0	110	70-130			
Ethyl ether	22.8		µg/l		20.0	114	70-130			
Tert-amyl methyl ether	22.6		µg/l		20.0	113	70-130			
Ethyl tert-butyl ether	23.6		µg/l		20.0	118	70-130			
Di-isopropyl ether	22.4		µg/l		20.0	112	70-130			
Tert-Butanol / butyl alcohol	252		µg/l		200	126	70-130			
1,4-Dioxane	212		µg/l		200	106	70-130			
trans-1,4-Dichloro-2-butene	23.9		µg/l		20.0	120	70-130			
Ethanol	466		µg/l		400	116	70-130			
Surrogate: 4-Bromofluorobenzene	31.4		µg/l		30.0	104	70-130			
Surrogate: Toluene-d8	30.5		µg/l		30.0	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	32.2		µg/l		30.0	107	70-130			
Surrogate: Dibromofluoromethane	34.9		µg/l		30.0	116	70-130			

LCS Dup (1400027-BS1)

QM10

Prepared & Analyzed: 02-Jan-14

Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit			
Batch 1400027 - SW846 5030 Water MS													
<u>LCS Dup (1400027-BSD1)</u>													
			QM10			Prepared & Analyzed: 02-Jan-14							
1,1,2-Trichlorotrifluoroethane (Freon 113)	26.8	QM9	µg/l		20.0	134	70-130	9	20				
Acetone	27.1		µg/l		20.0	135	70-130	17	20				
Acrylonitrile	21.0		µg/l		20.0	105	70-130	5	20				
Benzene	22.7		µg/l		20.0	114	70-130	6	20				
Bromobenzene	21.9		µg/l		20.0	110	70-130	8	20				
Bromoform	23.9		µg/l		20.0	119	70-130	0.08	20				
Bromochloromethane	25.3		µg/l		20.0	127	70-130	0.2	20				
Bromodichloromethane	26.3	QM9	µg/l		20.0	131	70-130	5	20				
Bromoform	25.8		µg/l		20.0	129	70-130	1	20				
n-Butylbenzene	22.3		µg/l		20.0	111	70-130	6	20				
sec-Butylbenzene	21.6		µg/l		20.0	108	70-130	6	20				
tert-Butylbenzene	22.2		µg/l		20.0	111	70-130	6	20				
Carbon disulfide	22.4		µg/l		20.0	112	70-130	9	20				
Carbon tetrachloride	25.0		µg/l		20.0	125	70-130	0.7	20				
Chlorobenzene	27.1	QC2	µg/l		20.0	135	70-130	2	20				
Chloroethane	20.9		µg/l		20.0	104	70-130	6	20				
Chloroform	23.3		µg/l		20.0	116	70-130	1	20				
Chloromethane	23.4		µg/l		20.0	117	70-130	2	20				
Chlorotoluene	23.0		µg/l		20.0	115	70-130	3	20				
2-Chlorotoluene	24.6		µg/l		20.0	123	70-130	5	20				
4-Chlorotoluene	23.1		µg/l		20.0	116	70-130	2	20				
1,2-Dibromo-3-chloropropane	25.6		µg/l		20.0	128	70-130	7	20				
Dibromochloromethane	24.8		µg/l		20.0	124	70-130	0.3	20				
1,2-Dibromoethane (EDB)	23.1		µg/l		20.0	115	70-130	4	20				
Dibromomethane	23.7		µg/l		20.0	118	70-130	4	20				
1,2-Dichlorobenzene	22.2		µg/l		20.0	111	70-130	4	20				
1,3-Dichlorobenzene	22.1		µg/l		20.0	110	70-130	6	20				
1,4-Dichlorobenzene	21.4		µg/l		20.0	107	70-130	7	20				
Dichlorodifluoromethane (Freon12)	23.4		µg/l		20.0	117	70-130	9	20				
1,1-Dichloroethane	23.8		µg/l		20.0	119	70-130	0.8	20				
1,2-Dichloroethane	23.1		µg/l		20.0	116	70-130	2	20				
1,1-Dichloroethene	24.5		µg/l		20.0	123	70-130	0.1	20				
cis-1,2-Dichloroethene	23.4		µg/l		20.0	117	70-130	2	20				
trans-1,2-Dichloroethene	24.3		µg/l		20.0	122	70-130	3	20				
1,2-Dichloropropane	22.1		µg/l		20.0	110	70-130	0.1	20				
1,3-Dichloropropane	22.5		µg/l		20.0	113	70-130	3	20				
2,2-Dichloropropane	29.2	QC2	µg/l		20.0	146	70-130	2	20				
1,1-Dichloropropene	22.9		µg/l		20.0	115	70-130	6	20				
cis-1,3-Dichloropropene	24.5		µg/l		20.0	122	70-130	3	20				
trans-1,3-Dichloropropene	25.5		µg/l		20.0	127	70-130	0.3	20				
Ethylbenzene	22.8		µg/l		20.0	114	70-130	5	20				
Hexachlorobutadiene	21.6		µg/l		20.0	108	70-130	0.9	20				
2-Hexanone (MBK)	21.9		µg/l		20.0	109	70-130	2	20				
Isopropylbenzene	22.8		µg/l		20.0	114	70-130	6	20				
4-Isopropyltoluene	23.0		µg/l		20.0	115	70-130	4	20				
Methyl tert-butyl ether	24.3		µg/l		20.0	122	70-130	0.2	20				
4-Methyl-2-pentanone (MIBK)	20.3		µg/l		20.0	102	70-130	3	20				
Methylene chloride	24.9		µg/l		20.0	125	70-130	5	20				
Naphthalene	18.8		µg/l		20.0	94	70-130	7	20				
n-Propylbenzene	21.2		µg/l		20.0	106	70-130	4	20				
Styrene	23.9		µg/l		20.0	120	70-130	8	20				
1,1,1,2-Tetrachloroethane	24.6		µg/l		20.0	123	70-130	7	20				

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>LCS Dup (1400027-BSD1)</u>										
			QM10			Prepared & Analyzed: 02-Jan-14				
1,1,2,2-Tetrachloroethane	25.6		µg/l		20.0	128	70-130	7	20	
Tetrachloroethene	21.9		µg/l		20.0	109	70-130	2	20	
Toluene	22.4		µg/l		20.0	112	70-130	5	20	
1,2,3-Trichlorobenzene	21.4		µg/l		20.0	107	70-130	9	20	
1,2,4-Trichlorobenzene	20.2		µg/l		20.0	101	70-130	8	20	
1,3,5-Trichlorobenzene	20.6		µg/l		20.0	103	70-130	6	20	
1,1,1-Trichloroethane	27.1	QM9	µg/l		20.0	136	70-130	5	20	
1,1,2-Trichloroethane	23.6		µg/l		20.0	118	70-130	6	20	
Trichloroethene	21.3		µg/l		20.0	107	70-130	0.3	20	
Trichlorofluoromethane (Freon 11)	25.3		µg/l		20.0	126	70-130	4	20	
1,2,3-Trichloropropane	22.8		µg/l		20.0	114	70-130	6	20	
1,2,4-Trimethylbenzene	21.6		µg/l		20.0	108	70-130	6	20	
1,3,5-Trimethylbenzene	21.4		µg/l		20.0	107	70-130	3	20	
Vinyl chloride	24.0		µg/l		20.0	120	70-130	7	20	
m,p-Xylene	45.8		µg/l		40.0	114	70-130	7	20	
o-Xylene	23.0		µg/l		20.0	115	70-130	0.7	20	
Tetrahydrofuran	24.9		µg/l		20.0	125	70-130	13	20	
Ethyl ether	23.8		µg/l		20.0	119	70-130	4	20	
Tert-amyl methyl ether	23.5		µg/l		20.0	118	70-130	4	20	
Ethyl tert-butyl ether	25.1		µg/l		20.0	125	70-130	6	20	
Di-isopropyl ether	23.4		µg/l		20.0	117	70-130	5	20	
Tert-Butanol / butyl alcohol	225		µg/l		200	113	70-130	11	20	
1,4-Dioxane	240		µg/l		200	120	70-130	13	20	
trans-1,4-Dichloro-2-butene	24.2		µg/l		20.0	121	70-130	0.9	20	
Ethanol	463		µg/l		400	116	70-130	0.7	20	
Surrogate: 4-Bromofluorobenzene	31.0		µg/l		30.0	103	70-130			
Surrogate: Toluene-d8	30.4		µg/l		30.0	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	32.2		µg/l		30.0	107	70-130			
Surrogate: Dibromofluoromethane	34.6		µg/l		30.0	115	70-130			

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331280 - SW846 3005A										
<u>Blank (1331280-BLK1)</u>										
Manganese	< 0.0043		mg/l	0.0043						
Sodium	< 0.350		mg/l	0.350						
Iron	< 0.0150		mg/l	0.0150						
Barium	< 0.0050		mg/l	0.0050						
Nickel	< 0.0050		mg/l	0.0050						
Lead	< 0.0075		mg/l	0.0075						
Zinc	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Chromium	< 0.0050		mg/l	0.0050						
Copper	< 0.0050		mg/l	0.0050						
Arsenic	< 0.0040		mg/l	0.0040						
<u>LCS (1331280-BS1)</u>										
Manganese	1.20		mg/l	0.0043	1.25	96	85-115			
Sodium	6.31		mg/l	0.350	6.25	101	85-115			
Iron	1.29		mg/l	0.0150	1.25	103	85-115			
Lead	1.11		mg/l	0.0075	1.25	89	85-115			
Nickel	1.10		mg/l	0.0050	1.25	88	85-115			
Barium	1.25		mg/l	0.0050	1.25	100	85-115			
Cadmium	1.20		mg/l	0.0025	1.25	96	85-115			
Chromium	1.15		mg/l	0.0050	1.25	92	85-115			
Zinc	1.11		mg/l	0.0050	1.25	88	85-115			
Arsenic	1.13		mg/l	0.0040	1.25	91	85-115			
Copper	1.13		mg/l	0.0050	1.25	90	85-115			
<u>LCS Dup (1331280-BSD1)</u>										
Sodium	6.32		mg/l	0.350	6.25	101	85-115	0.2	20	
Manganese	1.23		mg/l	0.0043	1.25	98	85-115	3	20	
Iron	1.30		mg/l	0.0150	1.25	104	85-115	0.5	20	
Cadmium	1.21		mg/l	0.0025	1.25	97	85-115	0.8	20	
Arsenic	1.14		mg/l	0.0040	1.25	91	85-115	0.6	20	
Barium	1.28		mg/l	0.0050	1.25	103	85-115	3	20	
Chromium	1.16		mg/l	0.0050	1.25	93	85-115	0.3	20	
Copper	1.12		mg/l	0.0050	1.25	89	85-115	1	20	
Nickel	1.09		mg/l	0.0050	1.25	87	85-115	0.8	20	
Zinc	1.10		mg/l	0.0050	1.25	88	85-115	0.6	20	
Lead	1.10		mg/l	0.0075	1.25	88	85-115	1	20	
<u>Duplicate (1331280-DUP1)</u>										
Iron	< 0.0150		mg/l	0.0150		BRL				20
Manganese	< 0.0043	R06	mg/l	0.0043		BRL				20
Sodium	0.174	J,R06	mg/l	0.350	0.195			11	20	
Nickel	< 0.0050		mg/l	0.0050		BRL				20
Barium	< 0.0050		mg/l	0.0050		BRL				20
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Lead	< 0.0075		mg/l	0.0075		BRL				20
Chromium	< 0.0050		mg/l	0.0050		BRL				20
Copper	0.0016	J,QR8	mg/l	0.0050	0.0012			33	20	
Zinc	< 0.0050		mg/l	0.0050		BRL				20
Arsenic	< 0.0040		mg/l	0.0040		BRL				20
<u>Matrix Spike (1331280-MS1)</u>										
Sodium	6.44		mg/l	0.350	6.25	100	75-125			
Manganese	1.25		mg/l	0.0043	1.25	BRL	100	75-125		
Iron	1.34		mg/l	0.0150	1.25	BRL	107	75-125		

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331280 - SW846 3005A										
<u>Matrix Spike (1331280-MS1)</u>										
Arsenic										
1.17										
Barium										
1.31										
Copper										
1.15										
Nickel										
1.12										
Lead										
1.13										
Zinc										
1.13										
Cadmium										
1.25										
Chromium										
1.19										
<u>Matrix Spike Dup (1331280-MSD1)</u>										
Manganese										
1.20										
Sodium										
6.30										
Iron										
1.33										
Chromium										
1.16										
Copper										
1.15										
Nickel										
1.12										
Lead										
1.13										
Zinc										
1.13										
Cadmium										
1.24										
Barium										
1.26										
Arsenic										
1.16										
<u>Post Spike (1331280-PS1)</u>										
Sodium										
6.60										
Iron										
1.48										
Manganese										
1.24										
Lead										
1.18										
Zinc										
1.18										
Nickel										
1.18										
Copper										
1.20										
Chromium										
1.21										
Barium										
1.31										
Arsenic										
1.21										
Cadmium										
1.28										

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1330853 - General Preparation										
<u>Blank (1330853-BLK1)</u>										
Sulfate as SO4	< 1.00		mg/l	1.00		Prepared & Analyzed: 23-Dec-13				
Chloride	< 1.00		mg/l	1.00						
Nitrite as N	< 0.100		mg/l	0.100						
Nitrate as N	< 0.100		mg/l	0.100						
<u>LCS (1330853-BS1)</u>										
Sulfate as SO4	19.3		mg/l	1.00	20.0	97	90-110			
Nitrite as N	2.03		mg/l	0.100	2.00	102	90-110			
Chloride	20.3		mg/l	1.00	20.0	102	90-110			
Nitrate as N	2.01		mg/l	0.100	2.00	100	90-110			
<u>Duplicate (1330853-DUP2)</u>										
Sulfate as SO4	629	D	mg/l	25.0		629			0.07	20
Nitrite as N	< 0.100		mg/l	0.100		BRL				
Chloride	310	D	mg/l	25.0		309			0.2	20
Nitrate as N	43.4	D	mg/l	2.50		43.3			0.01	20
<u>Matrix Spike (1330853-MS2)</u>										
Sulfate as SO4	612	QM2	mg/l	1.00	4.00	629	-423	90-110		
Chloride	312	QM2	mg/l	1.00	4.00	309	61	90-110		
Nitrite as N	0.372		mg/l	0.100	0.400	BRL	93	90-110		
Nitrate as N	45.9	QM2	mg/l	0.100	0.400	43.3	649	90-110		
<u>Matrix Spike Dup (1330853-MSD2)</u>										
Chloride	315	QM2	mg/l	1.00	4.00	309	140	90-110	1	20
Sulfate as SO4	622	QM2	mg/l	1.00	4.00	629	-190	90-110	2	20
Nitrite as N	0.381		mg/l	0.100	0.400	BRL	95	90-110	2	20
Nitrate as N	46.4	QM2	mg/l	0.100	0.400	43.3	771	90-110	1	20
<u>Reference (1330853-SRM1)</u>										
Sulfate as SO4	25.1		mg/l	1.00	25.0	100	90-110			
Nitrite as N	2.59		mg/l	0.100	2.50	104	90-110			
Chloride	24.9		mg/l	1.00	25.0	100	90-110			
Nitrate as N	2.60		mg/l	0.100	2.50	104	90-110			
Batch 1330892 - General Preparation										
<u>Blank (1330892-BLK1)</u>										
Total Suspended Solids	< 5.0		mg/l	5.0		Prepared: 24-Dec-13 Analyzed: 26-Dec-13				
<u>LCS (1330892-BS1)</u>										
Total Suspended Solids	98.0		mg/l	10.0	100	98	90-110			
Batch 1330967 - General Preparation										
<u>Blank (1330967-BLK1)</u>										
Ammonia as N	< 0.100		mg/l	0.100		Prepared: 26-Dec-13 Analyzed: 27-Dec-13				
<u>LCS (1330967-BS1)</u>										
Ammonia as N	2.55		mg/l	0.100	2.50	102	90-110			
<u>Duplicate (1330967-DUP1)</u>										
Ammonia as N	13.2	D	mg/l	0.500		12.8			4	20
<u>Matrix Spike (1330967-MS1)</u>										
Ammonia as N	15.2	D	mg/l	0.400	2.50	12.8	99	80-120		
<u>Reference (1330967-SRM1)</u>										
Ammonia as N	1.15		mg/l	0.100	1.04	111	84-116			
Batch 1331086 - General Preparation										
<u>Blank (1331086-BLK1)</u>										
Total Dissolved Solids	< 5		mg/l	5		Prepared: 27-Dec-13 Analyzed: 30-Dec-13				
<u>LCS (1331086-BS1)</u>										
Total Dissolved Solids	946		mg/l	10	1000	95	90-110			

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1331086 - General Preparation										
<u>Duplicate (1331086-DUP1)</u>										
Total Dissolved Solids	7		mg/l	5		7			0	20
Batch 1331217 - General Preparation										
<u>Blank (1331217-BLK1)</u>										
Total Organic Carbon	< 1.00		mg/l	1.00				Prepared & Analyzed: 27-Dec-13		
<u>LCS (1331217-BS1)</u>										
Total Organic Carbon	16.5		mg/l	1.00	15.0	110		85-115		
<u>Calibration Blank (1331217-CCB1)</u>										
Total Organic Carbon	0.365		mg/l					Prepared & Analyzed: 27-Dec-13		
<u>Calibration Blank (1331217-CCB2)</u>										
Total Organic Carbon	0.353		mg/l					Prepared & Analyzed: 27-Dec-13		
<u>Calibration Blank (1331217-CCB3)</u>										
Total Organic Carbon	0.694		mg/l					Prepared & Analyzed: 27-Dec-13		
<u>Calibration Check (1331217-CCV1)</u>										
Total Organic Carbon	5.10		mg/l	1.00	5.00	102		85-115		
<u>Calibration Check (1331217-CCV2)</u>										
Total Organic Carbon	4.74		mg/l	1.00	5.00	95		85-115		
<u>Calibration Check (1331217-CCV3)</u>										
Total Organic Carbon	5.72		mg/l	1.00	5.00	114		85-115		
<u>Reference (1331217-SRM1)</u>										
Total Organic Carbon	8.19		mg/l	1.00	8.20	100		87-113		
Batch 1331403 - General Preparation										
<u>Blank (1331403-BLK1)</u>										
Total Organic Carbon	< 1.00		mg/l	1.00				Prepared: 30-Dec-13 Analyzed: 31-Dec-13		
<u>LCS (1331403-BS1)</u>										
Total Organic Carbon	13.8		mg/l	1.00	15.0	92		85-115		
<u>Calibration Blank (1331403-CCB1)</u>										
Total Organic Carbon	0.390		mg/l					Prepared: 30-Dec-13 Analyzed: 31-Dec-13		
<u>Calibration Blank (1331403-CCB2)</u>										
Total Organic Carbon	0.362		mg/l					Prepared: 30-Dec-13 Analyzed: 31-Dec-13		
<u>Calibration Blank (1331403-CCB3)</u>										
Total Organic Carbon	0.350		mg/l					Prepared: 30-Dec-13 Analyzed: 31-Dec-13		
<u>Calibration Check (1331403-CCV1)</u>										
Total Organic Carbon	4.75		mg/l	1.00	5.00	95		85-115		
<u>Calibration Check (1331403-CCV2)</u>										
Total Organic Carbon	4.58		mg/l	1.00	5.00	92		85-115		
<u>Calibration Check (1331403-CCV3)</u>										
Total Organic Carbon	4.68		mg/l	1.00	5.00	94		85-115		
<u>Duplicate (1331403-DUP1)</u>										
Total Organic Carbon	132		mg/l	40.0		129			2	20
<u>Matrix Spike (1331403-MS1)</u>										
Total Organic Carbon	321		mg/l	40.0	200	129	96	70-130		
<u>Matrix Spike Dup (1331403-MSD1)</u>										
Total Organic Carbon	300		mg/l	40.0	200	129	85	70-130	7	30
<u>Reference (1331403-SRM1)</u>										
Total Organic Carbon	7.14		mg/l	1.00	8.20	87		87-113		
Batch 1400190 - General Preparation										
<u>Blank (1400190-BLK1)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500				Prepared & Analyzed: 03-Jan-14		
<u>Blank (1400190-BLK2)</u>										
								Prepared & Analyzed: 03-Jan-14		

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General Chemistry Parameters - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400190 - General Preparation										
<u>Blank (1400190-BLK2)</u>										
Cyanide (total)	< 0.00500		mg/l	0.00500				Prepared & Analyzed: 03-Jan-14		
<u>LCS (1400190-BS1)</u>								Prepared & Analyzed: 03-Jan-14		
Cyanide (total)	0.337	QC2	mg/l	0.00500	0.300		112	90-110		
<u>LCS (1400190-BS2)</u>								Prepared & Analyzed: 03-Jan-14		
Cyanide (total)	0.316		mg/l	0.00500	0.300		105	90-110		
<u>Duplicate (1400190-DUP1)</u>						<u>Source: SB82439-08</u>		Prepared & Analyzed: 03-Jan-14		
Cyanide (total)	< 0.00500		mg/l	0.00500			0.00457			20
<u>Matrix Spike (1400190-MS1)</u>						<u>Source: SB82439-08</u>		Prepared & Analyzed: 03-Jan-14		
Cyanide (total)	0.261	QM9	mg/l	0.00500	0.300	0.00457	85	90-110		
<u>Matrix Spike Dup (1400190-MSD1)</u>						<u>Source: SB82439-08</u>		Prepared & Analyzed: 03-Jan-14		
Cyanide (total)	0.295		mg/l	0.00500	0.300	0.00457	97	90-110	12	20
<u>Reference (1400190-SRM1)</u>								Prepared & Analyzed: 03-Jan-14		
Cyanide (total)	0.160		mg/l	0.00500	0.168		95	74.9-125		

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Subcontracted Analyses - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 263339A - 263339										
<u>BLK (BF91813-BLK)</u>						<u>Source: SB82369-05</u>		Prepared & Analyzed: 30-Dec-13	-	
Phenolics	< 0.015		mg/L	0.015						
<u>DUP (BF91813-DUP)</u>						<u>Source: SB82369-05</u>		Prepared & Analyzed: 30-Dec-13	-	
Phenolics	ND		mg/L				BRL	-	0	20
<u>LCS (BF91813-LCS)</u>						<u>Source: SB82369-05</u>		Prepared & Analyzed: 30-Dec-13	-	
Phenolics	ND		mg/L				100	70-130		20
<u>MS (BF91813-MS)</u>						<u>Source: SB82369-05</u>		Prepared & Analyzed: 30-Dec-13	-	
Phenolics	ND		mg/L				93.5	70-130		20

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Notes and Definitions

D	Data reported from a dilution
E	This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QCR	Sample data reported for QC purposes only.
QM10	LCS/LCSD were analyzed in place of MS/MSD.
QM2	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
QR5	RPD out of acceptance range.
QR8	Analyses are not controlled on RPD values from sample concentrations that are less than 5 times the reporting level. The batch is accepted based upon the difference between the sample and duplicate is less than or equal to the reporting limit.
R06	IMRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
LIV	The initial volume for this sample has been reduced due to sample matrix and/or historical data therefore elevating the reporting limit.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Nicole Leja
Rebecca Merz

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CHAIN OF CUSTODY RECORD

SB 82439 ✓ 8/1

Special Handling:

- Standard TAT - 7 to 10 business days
 Rush TAT - Date Needed: _____
 - All TATs subject to laboratory approval.
 - Min. 24-hour notification needed for rushes.
 - Samples disposed of after 60 days unless otherwise instructed.

Page 1 of 1

Report To: ENVIRON
 3 Carlisle Rd Suite 210
 Westford, MA

Telephone #: 603-703-5534

Project Mgr. John Noble

Invoice To: Kris Sibinga
 Envirite Corporation
 PO Box 591
 Chappaqua, NY 10514

P.O. No.: RQN: 7694

Project No.: 08-14218G2

Site Name: Envirite RCRA Landfill

Location: Thomaston

State: CT

Sampler(s): Luke C / John U

List preservative code below:

2 10 5 4 3

QA/QC Reporting Notes:
 * additional charges may apply

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9=Deionized Water 10=H₃PO₄ 11= 12=

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air

X1=Trip Blank X2=Equipment Blank X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers:			Analyses:			MA DEP MCP CAM Report: Yes <input type="checkbox"/> No <input type="checkbox"/> CT DPH RCP Report: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
						# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Total Cyanide	Chloride, Sulfate	
82439-01	TB-20131223	12-23-13	0800	G	X1	1				As, Ba, Cd, Cr, Cu, Fe, Pb, Mn, Na, Ni, Zn		
02	EB-20131223		1300		X2	5	1	5		X X X X X X X X X X X X		
03	MW-36/20131223		0945		GW	5	1	5		X X X X X X X X X X X X		
04	MW-37D/20131223		1050			5	1	5		X X X X X X X X X X X X		
05	MW-37B/20131223		1230			5	1	5		X X X X X X X X X X X X		
06	MW-315/20131223		1400			5	1	5		X X X X X X X X X X X X		
07	MW-31B/20131223		0940			5	1	5		X X X X X X X X X X X X		
08	DUP-20131223	12-23-13	NA	G	GW	5	1	5		X X X X X X X X X X X X		

11/11/14 14.5 | R01
3/1
2/10/13

Relinquished by:

Received by:

Date: 12-23-13

Time: 3:15

Temp °C

12/23/13 16:15

 EDD Format Environ Equis 4-File E-mail to jnobles@environecorp.comCondition upon receipt: Custody Seals: Present Intact Broken
 Ambient Iced Refrigerated DI VOA Frozen Soil Jar Frozen

Report Date:
10-Jan-14 10:33

- Final Report
 Re-Issued Report
 Revised Report



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY
Laboratory Report

ENVIRON International Corporation
3 Carlisle Rd
Westford, MA 01886
Attn: John Noble

Project: Envirite RCRA Landfill - Thomaston, CT
Project #: 08-14218G2

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB82699-01	TB-20131227	Trip Blank	27-Dec-13 10:00	30-Dec-13 17:10
SB82699-02	EB-20131227	Equipment Blank	27-Dec-13 12:00	30-Dec-13 17:10
SB82699-03	SW-NR-1/20131227	Surface Water	27-Dec-13 10:30	30-Dec-13 17:10
SB82699-04	SW-NR-2/20131227	Surface Water	27-Dec-13 10:50	30-Dec-13 17:10
SB82699-05	SW-BB-1/20131227	Surface Water	27-Dec-13 11:40	30-Dec-13 17:10
SB82699-06	SW-BB-2/20131227	Surface Water	27-Dec-13 11:20	30-Dec-13 17:10

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435



Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 41 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Reasonable Confidence Protocols
Laboratory Analysis
QA/QC Certification Form

Laboratory Name: Spectrum Analytical, Inc.

Project Location: Envirite RCRA Landfill - Thomaston, CT

Sampling Date(s):

12/27/2013

RCP Methods Used:

EPA 200.7/3005A/6010

SW846 6010C

SW846 8260C

Client: ENVIRON International Corporation - Westford, MA

Project Number: 08-14218G2

Laboratory Sample ID(s):

SB82699-01 through SB82699-06

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CT DEP method-specific Reasonable Confidence Protocol documents?	<input checked="" type="checkbox"/> Yes	No
1A	Were the method specified preservation and holding time requirements met?	<input checked="" type="checkbox"/> Yes	No
1B	VPH and EPH methods only: Was the VPH or EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	Yes	No
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes	No
3	Were samples received at an appropriate temperature?	<input checked="" type="checkbox"/> Yes	No
4	Were all QA/QC performance criteria specified in the Reasonable Confidence Protocol documents achieved?	Yes	<input checked="" type="checkbox"/> No
5	a) Were reporting limits specified or referenced on the chain-of-custody? b) Were these reporting limits met?	Yes Yes	<input checked="" type="checkbox"/> No No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	Yes	<input checked="" type="checkbox"/> No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes	No

Note: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for obtaining the information contained in this analytical report, such information is accurate and complete.

Nicole Leja
 Laboratory Director
 Date: 1/10/2014

CASE NARRATIVE:

Data has been reported to the RDL. This report excludes estimated concentrations detected below the RDL and above the MDL (J-Flag).

The samples were received -0.2 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

Required site-specific Matrix Spike/Matrix Spike Duplicate (MS/MSD) must be requested by the client and sufficient sample must be submitted for the additional analyses. Samples submitted with insufficient volume/weight will not be analyzed for site specific MS/MSD, however a batch MS/MSD may be analyzed from a non-site specific sample.

CTDEP has published a list of analytical methods which provides a series of recommended protocols for the acquisition, analysis and reporting of analytical data in support of decisions being made utilizing the Reasonable Confidence Protocol (RCP). "Reasonable Confidence" can be established only for those methods published by the CTDEP in the RCP guidelines. The compounds and/or elements reported were specifically requested by the client on the Chain of Custody and in some cases may not include the full analyte list as defined in the method. Regulatory limits may not be achieved if specific method and/or technique was not requested on the Chain of Custody.

The CTDEP RCP requests that "all non-detects and all results below the reporting limit are reported as ND (Not Detected at the Specified Reporting Limit)". All non-detects and all results below the reporting limit are reported as "<" (less than) the reporting limit in this report.

If no reporting limits were specified or referenced on the chain-of-custody the laboratory's practical quantitation limits were applied.

According to CTDEP RCP Quality Assurance and Quality Control Requirements for VOCs by method 8260, SW-846 version 1, 7/28/05 Table 1A, recovery for some VOC analytes have been deemed potentially difficult.

For this work order, the reporting limits have not been referenced or specified.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 6010C

Duplicates:

1400310-DUP1 *Source: SB82699-04*

IMRL raised to correlate to batch QC reporting limits.

Zinc

Samples:

SB82699-02 *EB-20131227*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82699-03 *SW-NR-1/20131227*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82699-04 *SW-NR-2/20131227*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82699-05 *SW-BB-1/20131227*

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SW846 6010C

Samples:

SB82699-05 *SW-BB-1/20131227*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SB82699-06 *SW-BB-2/20131227*

IMRL raised to correlate to batch QC reporting limits.

Zinc

SW846 8260C

Calibration:

1312068

Analyte quantified by quadratic equation type calibration.

1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2-Dibromo-3-chloropropane
1,3,5-Trichlorobenzene
2-Hexanone (MBK)
Acetone
Bromoform
cis-1,3-Dichloropropene
Dibromochloromethane
Hexachlorobutadiene
Naphthalene
n-Butylbenzene
trans-1,3-Dichloropropene

This affected the following samples:

1400027-BLK1
1400027-BS1
1400027-BSD1
EB-20131227
S315401-ICV1
S400003-CCV1
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

1312096

SW846 8260C

Calibration:

1312096

Analyte quantified by quadratic equation type calibration.

1,1-Dichloroethene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,3,5-Trichlorobenzene
1,3,5-Trimethylbenzene
1,4-Dichlorobenzene
Bromoform
Chloroethane
cis-1,3-Dichloropropene
Dibromochloromethane
Methylene chloride
Naphthalene
n-Butylbenzene
n-Propylbenzene
sec-Butylbenzene
Styrene
Tert-amyl methyl ether
tert-Butylbenzene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Vinyl chloride

This affected the following samples:

1400235-BLK1
1400235-BS1
1400235-BSD1
S315848-ICV1
S400102-CCV1
SW-NR-2/20131227

S315848-ICV1

Analyte percent recovery is outside individual acceptance criteria.

2,2-Dichloropropane (79%)
Ethanol (76%)

This affected the following samples:

1400235-BLK1
1400235-BS1
1400235-BSD1
S400102-CCV1
SW-NR-2/20131227

Laboratory Control Samples:

1400027 BS/BSD

SW846 8260C

Laboratory Control Samples:

1400027 BS/BSD

1,1,1-Trichloroethane percent recoveries (129/136) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

1,1,2-Trichlorotrifluoroethane (Freon 113) percent recoveries (123/134) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

1,2-Dibromo-3-chloropropane percent recoveries (137/128) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

2,2-Dichloropropane percent recoveries (142/146) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

Acetone percent recoveries (115/135) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

Bromoform percent recoveries (125/131) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

SW846 8260C

Laboratory Control Samples:

1400027 BS/BSD

Carbon tetrachloride percent recoveries (132/135) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

1400027-BSD1

LCS/LCSD were analyzed in place of MS/MSD.

1400235 BS/BSD

Ethyl tert-butyl ether percent recoveries (140/143) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

SW-NR-2/20131227

Methyl tert-butyl ether percent recoveries (130/133) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

SW-NR-2/20131227

Tert-Butanol / butyl alcohol percent recoveries (143/139) are outside individual acceptance criteria, but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

SW-NR-2/20131227

Samples:

S400003-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1,2-Tetrachloroethane (20.6%)
1,1,1-Trichloroethane (28.4%)
1,1,2,2-Tetrachloroethane (21.0%)
2,2-Dichloropropane (49.4%)
Bromodichloromethane (32.2%)
Carbon tetrachloride (32.4%)
trans-1,4-Dichloro-2-butene (27.2%)
Vinyl chloride (20.6%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,2-Dibromo-3-chloropropane (24.0%)
Bromoform (26.1%)
Dibromochloromethane (23.0%)

SW846 8260C

Samples:

S400003-CCV1

This affected the following samples:

1400027-BLK1
1400027-BS1
1400027-BSD1
EB-20131227
SW-BB-1/20131227
SW-BB-2/20131227
SW-NR-1/20131227
SW-NR-2/20131227
TB-20131227

S400102-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1,2-Tetrachloroethane (23.7%)
1,4-Dioxane (23.5%)
2,2-Dichloropropane (32.8%)
Carbon tetrachloride (22.1%)
Ethyl tert-butyl ether (42.1%)
Methyl tert-butyl ether (36.5%)
Tert-Butanol / butyl alcohol (33.8%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

1,2-Dibromo-3-chloropropane (24.4%)
Bromoform (20.4%)
trans-1,3-Dichloropropene (25.7%)

This affected the following samples:

1400235-BLK1
1400235-BS1
1400235-BSD1
SW-NR-2/20131227

Sample Acceptance Check Form

Client: ENVIRON International Corporation - Westford, MA
Project: Envirite RCRA Landfill - Thomaston, CT / 08-14218G2
Work Order: SB82699
Sample(s) received on: 12/30/2013
Received by: Jessica Hoffman

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
1. Were custody seals present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Were custody seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Were samples received at a temperature of $\leq 6^{\circ}\text{C}$?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were samples cooled on ice upon transfer to laboratory representative?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Were samples refrigerated upon transfer to laboratory representative?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Were sample containers received intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were samples accompanied by a Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did sample container labels agree with Chain of Custody document?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were samples received within method-specific holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Identification

TB-20131227

SB82699-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

27-Dec-13 10:00

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

TB-20131227

SB82699-01

Client Project #

08-14218G2

Matrix

Trip Blank

Collection Date/Time

27-Dec-13 10:00

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	98	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	108	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	112	70-130 %	"	"	"	"	"	"	"	"	"	"

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

EB-20131227

SB82699-02

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

27-Dec-13 12:00

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromoform	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification

EB-20131227

SB82699-02

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

27-Dec-13 12:00

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	93		70-130 %									
2037-26-5	Toluene-d8	100		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	114		70-130 %									
1868-53-7	Dibromofluoromethane	121		70-130 %									

Soluble Metals by EPA 200/6000 Series Methods

Filtration	Field Filtered	N/A	1	EPA 200.7/3005A/6010	LNB	1331390
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Sample Identification

EB-20131227

SB82699-02

Client Project #

08-14218G2

Matrix

Equipment Blank

Collection Date/Time

27-Dec-13 12:00

Received

30-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>*RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Soluble Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	08-Jan-14	09-Jan-14	tbc	1400310	X
7440-39-3	Barium	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	< 0.0150		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0088		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	< 0.250		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0150	R06	mg/l	0.0150	0.0020	1	"	"	"	"	"	X

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Sample Identification

SW-NR-1/20131227

SB82699-03

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:30

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

SW-NR-1/20131227

SB82699-03

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:30

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94		70-130 %									
2037-26-5	Toluene-d8	99		70-130 %									
17060-07-0	1,2-Dichloroethane-d4	113		70-130 %									
1868-53-7	Dibromofluoromethane	104		70-130 %									

Soluble Metals by EPA 200/6000 Series Methods

Filtration	Field Filtered	N/A	1	EPA 200.7/3005A/6010	LNB	1331390
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Sample Identification

SW-NR-1/20131227

SB82699-03

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:30

Received

30-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Soluble Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	08-Jan-14	09-Jan-14	tbc	1400310	X
7440-39-3	Barium	0.0198		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.0935		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0291		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	29.8		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0150	R06	mg/l	0.0150	0.0020	1	"	"	"	"	"	X

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Sample Identification

SW-NR-2/20131227

SB82699-04

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:50

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

SW-NR-2/20131227

SB82699-04

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:50

Received

30-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	94	70-130 %	"	"	"	"	"	"	"	"	"	"
2037-26-5	Toluene-d8	101	70-130 %	"	"	"	"	"	"	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	116	70-130 %	"	"	"	"	"	"	"	"	"	"
1868-53-7	Dibromofluoromethane	122	70-130 %	"	"	"	"	"	"	"	"	"	"

Re-analysis of Volatile Organic Compounds by SW846 8260Prepared by method SW846 5030 Water MS*This laboratory report is not valid without an authorized signature on the cover page.*

Sample Identification

SW-NR-2/20131227

SB82699-04

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:50

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	06-Jan-14	06-Jan-14	GMA	1400235	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X

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Sample Identification

SW-NR-2/20131227

SB82699-04

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:50

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Compounds by SW846													
8260													
Prepared by method SW846 5030 Water MS													
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	SW846 8260C	06-Jan-14	06-Jan-14	GMA	1400235	X
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromo fluorobenzene	91	70-130 %	"	"	"	"
2037-26-5	Toluene-d8	103	70-130 %	"	"	"	"
17060-07-0	1,2-Dichloroethane-d4	106	70-130 %	"	"	"	"
1868-53-7	Dibromofluoromethane	101	70-130 %	"	"	"	"

Soluble Metals by EPA 200/6000 Series Methods

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Sample Identification

SW-NR-2/20131227

SB82699-04

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 10:50

Received

30-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Soluble Metals by EPA 200/6000 Series Methods													
	Filtration		Field Filtered	N/A			1	EPA 200.7/3005A/6010			LNB	1331390	
Soluble Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	08-Jan-14	09-Jan-14	tbc	1400310	X
7440-39-3	Barium	0.0193		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.107		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0276		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	30.2		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0150	R06	mg/l	0.0150	0.0020	1	"	"	"	"	"	X

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Sample Identification

SW-BB-1/20131227

SB82699-05

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 11:40

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

SW-BB-1/20131227

SB82699-05

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 11:40

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	93	70-130 %
2037-26-5	Toluene-d8	104	70-130 %
17060-07-0	1,2-Dichloroethane-d4	115	70-130 %
1868-53-7	Dibromofluoromethane	105	70-130 %

Soluble Metals by EPA 200/6000 Series Methods

Filtration	Field Filtered	N/A	1	EPA 200.7/3005A/6010	LNB	1331390
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Sample Identification

SW-BB-1/20131227

SB82699-05

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 11:40

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Soluble Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	08-Jan-14	09-Jan-14	tbc	1400310	X
7440-39-3	Barium	0.0126		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.182		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0685		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	13.0		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0150	R06	mg/l	0.0150	0.0020	1	"	"	"	"	"	X

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Sample Identification

SW-BB-2/20131227

SB82699-06

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 11:20

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
76-13-1	1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00	0.65	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
67-64-1	Acetone	< 10.0		µg/l	10.0	2.56	1	"	"	"	"	"	X
107-13-1	Acrylonitrile	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
71-43-2	Benzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
108-86-1	Bromobenzene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
74-97-5	Bromochloromethane	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
75-27-4	Bromodichloromethane	< 0.50		µg/l	0.50	0.48	1	"	"	"	"	"	X
75-25-2	Bromoform	< 1.00		µg/l	1.00	0.60	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.00		µg/l	2.00	1.14	1	"	"	"	"	"	X
78-93-3	2-Butanone (MEK)	< 10.0		µg/l	10.0	1.93	1	"	"	"	"	"	X
104-51-8	n-Butylbenzene	< 1.00		µg/l	1.00	0.56	1	"	"	"	"	"	X
135-98-8	sec-Butylbenzene	< 1.00		µg/l	1.00	0.82	1	"	"	"	"	"	X
98-06-6	tert-Butylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-15-0	Carbon disulfide	< 2.00		µg/l	2.00	1.28	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.00		µg/l	1.00	0.55	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.00		µg/l	2.00	1.00	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.00		µg/l	2.00	1.47	1	"	"	"	"	"	X
95-49-8	2-Chlorotoluene	< 1.00		µg/l	1.00	0.79	1	"	"	"	"	"	X
106-43-4	4-Chlorotoluene	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
96-12-8	1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00	1.20	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.50		µg/l	0.50	0.34	1	"	"	"	"	"	X
106-93-4	1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
74-95-3	Dibromomethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.00		µg/l	1.00	0.71	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00	0.45	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00		µg/l	1.00	0.68	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.00		µg/l	1.00	0.49	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.00		µg/l	1.00	0.83	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.00		µg/l	1.00	0.77	1	"	"	"	"	"	X
142-28-9	1,3-Dichloropropane	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
594-20-7	2,2-Dichloropropane	< 1.00		µg/l	1.00	0.87	1	"	"	"	"	"	X
563-58-6	1,1-Dichloropropene	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.36	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.50		µg/l	0.50	0.50	1	"	"	"	"	"	X
100-41-4	Ethylbenzene	< 1.00		µg/l	1.00	0.95	1	"	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.50		µg/l	0.50	0.49	1	"	"	"	"	"	X
591-78-6	2-Hexanone (MBK)	< 10.0		µg/l	10.0	0.66	1	"	"	"	"	"	X

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Sample Identification

SW-BB-2/20131227

SB82699-06

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 11:20

Received

30-Dec-13

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
<u>Volatile Organic Compounds by SW846 8260</u>													
<u>Prepared by method SW846 5030 Water MS</u>													
98-82-8	Isopropylbenzene	< 1.00		µg/l	1.00	0.62	1	SW846 8260C	02-Jan-14	02-Jan-14	naa	1400027	X
99-87-6	4-Isopropyltoluene	< 1.00		µg/l	1.00	0.61	1	"	"	"	"	"	X
1634-04-4	Methyl tert-butyl ether	< 1.00		µg/l	1.00	0.65	1	"	"	"	"	"	X
108-10-1	4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0	2.76	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.00		µg/l	2.00	0.95	1	"	"	"	"	"	X
91-20-3	Naphthalene	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
103-65-1	n-Propylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
100-42-5	Styrene	< 1.00		µg/l	1.00	0.62	1	"	"	"	"	"	X
630-20-6	1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00	0.67	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50	0.32	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
108-88-3	Toluene	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
87-61-6	1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00	0.38	1	"	"	"	"	"	X
120-82-1	1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00	0.36	1	"	"	"	"	"	X
108-70-3	1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.00		µg/l	1.00	0.58	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.00		µg/l	1.00	0.64	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00	0.63	1	"	"	"	"	"	X
96-18-4	1,2,3-Trichloropropane	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
95-63-6	1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00	0.76	1	"	"	"	"	"	X
108-67-8	1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00	0.74	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.00		µg/l	1.00	0.81	1	"	"	"	"	"	X
179601-23-1	m,p-Xylene	< 2.00		µg/l	2.00	1.64	1	"	"	"	"	"	X
95-47-6	o-Xylene	< 1.00		µg/l	1.00	0.88	1	"	"	"	"	"	X
109-99-9	Tetrahydrofuran	< 2.00		µg/l	2.00	1.44	1	"	"	"	"	"	X
60-29-7	Ethyl ether	< 1.00		µg/l	1.00	0.69	1	"	"	"	"	"	X
994-05-8	Tert-amyl methyl ether	< 1.00		µg/l	1.00	0.72	1	"	"	"	"	"	X
637-92-3	Ethyl tert-butyl ether	< 1.00		µg/l	1.00	0.78	1	"	"	"	"	"	X
108-20-3	Di-isopropyl ether	< 1.00		µg/l	1.00	0.73	1	"	"	"	"	"	X
75-65-0	Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0	8.64	1	"	"	"	"	"	X
123-91-1	1,4-Dioxane	< 20.0		µg/l	20.0	12.0	1	"	"	"	"	"	X
110-57-6	trans-1,4-Dichloro-2-buten e	< 5.00		µg/l	5.00	0.74	1	"	"	"	"	"	X
64-17-5	Ethanol	< 400		µg/l	400	35.0	1	"	"	"	"	"	X

Surrogate recoveries:

460-00-4	4-Bromofluorobenzene	92	70-130 %
2037-26-5	Toluene-d8	104	70-130 %
17060-07-0	1,2-Dichloroethane-d4	118	70-130 %
1868-53-7	Dibromofluoromethane	109	70-130 %

Soluble Metals by EPA 200/6000 Series Methods

Filtration	Field Filtered	N/A	1	EPA 200.7/3005A/6010	LNB	1331390
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Sample Identification

SW-BB-2/20131227

SB82699-06

Client Project #

08-14218G2

Matrix

Surface Water

Collection Date/Time

27-Dec-13 11:20

Received

30-Dec-13

<u>CAS No.</u>	<u>Analyte(s)</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	* <u>RDL</u>	<u>MDL</u>	<u>Dilution</u>	<u>Method Ref.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Analyst</u>	<u>Batch</u>	<u>Cert.</u>
Soluble Metals by EPA 6000/7000 Series Methods													
7440-38-2	Arsenic	< 0.0040		mg/l	0.0040	0.0018	1	SW846 6010C	08-Jan-14	09-Jan-14	tbc	1400310	X
7440-39-3	Barium	0.0128		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7440-43-9	Cadmium	< 0.0025		mg/l	0.0025	0.0008	1	"	"	"	"	"	X
7440-47-3	Chromium	< 0.0050		mg/l	0.0050	0.0009	1	"	"	"	"	"	X
7440-50-8	Copper	< 0.0050		mg/l	0.0050	0.0011	1	"	"	"	"	"	X
7439-89-6	Iron	0.156		mg/l	0.0150	0.0074	1	"	"	"	"	"	X
7439-96-5	Manganese	0.0764		mg/l	0.0020	0.0012	1	"	"	"	"	"	X
7440-23-5	Sodium	13.4		mg/l	0.250	0.0325	1	"	"	"	"	"	X
7440-02-0	Nickel	< 0.0050		mg/l	0.0050	0.0007	1	"	"	"	"	"	X
7439-92-1	Lead	< 0.0075		mg/l	0.0075	0.0020	1	"	"	"	"	"	X
7440-66-6	Zinc	< 0.0150	R06	mg/l	0.0150	0.0020	1	"	"	"	"	"	X

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>Blank (1400027-BLK1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l	1.00						
Acetone	< 10.0		µg/l	10.0						
Acrylonitrile	< 0.50		µg/l	0.50						
Benzene	< 1.00		µg/l	1.00						
Bromobenzene	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromochloromethane	< 0.50		µg/l	0.50						
Bromodichloromethane	< 1.00		µg/l	1.00						
Bromoform	< 1.00		µg/l	1.00						
Bromomethane	< 2.00		µg/l	2.00						
2-Butanone (MEK)	< 10.0		µg/l	10.0						
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>Blank (1400027-BLK1)</u>										
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						
1,2,3-Trichloropropane	< 1.00		µg/l	1.00						
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
Surrogate: 4-Bromofluorobenzene	27.4		µg/l	30.0		91		70-130		
Surrogate: Toluene-d8	30.0		µg/l	30.0		100		70-130		
Surrogate: 1,2-Dichloroethane-d4	36.0		µg/l	30.0		120		70-130		
Surrogate: Dibromofluoromethane	38.9		µg/l	30.0		130		70-130		
<u>LCS (1400027-BS1)</u>										
Prepared & Analyzed: 02-Jan-14										
1,1,2-Trichlorotrifluoroethane (Freon 113)	24.6		µg/l	20.0		123		70-130		
Acetone	23.0		µg/l	20.0		115		70-130		
Acrylonitrile	22.1		µg/l	20.0		110		70-130		
Benzene	21.5		µg/l	20.0		107		70-130		
Bromobenzene	20.2		µg/l	20.0		101		70-130		
Bromoform	23.8		µg/l	20.0		119		70-130		
Bromochloromethane	25.4		µg/l	20.0		127		70-130		
Bromodichloromethane	25.0		µg/l	20.0		125		70-130		
Bromoform	25.5		µg/l	20.0		128		70-130		
2-Butanone (MEK)	23.6		µg/l	20.0		118		70-130		
n-Butylbenzene	20.3		µg/l	20.0		102		70-130		
sec-Butylbenzene	20.9		µg/l	20.0		104		70-130		
tert-Butylbenzene	20.5		µg/l	20.0		102		70-130		
Carbon disulfide	25.1		µg/l	20.0		126		70-130		
Carbon tetrachloride	26.5	QC2	µg/l	20.0		132		70-130		
Chlorobenzene	19.7		µg/l	20.0		98		70-130		
Chloroethane	23.5		µg/l	20.0		118		70-130		
Chloroform	22.9		µg/l	20.0		114		70-130		
Chloromethane	22.4		µg/l	20.0		112		70-130		
2-Chlorotoluene	23.5		µg/l	20.0		117		70-130		
4-Chlorotoluene	22.6		µg/l	20.0		113		70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>LCS (1400027-BS1)</u>										
<i>Prepared & Analyzed: 02-Jan-14</i>										
1,2-Dibromo-3-chloropropane	27.5	QM9	µg/l		20.0	137	70-130			
Dibromochloromethane	24.9		µg/l		20.0	124	70-130			
1,2-Dibromoethane (EDB)	22.1		µg/l		20.0	110	70-130			
Dibromomethane	22.8		µg/l		20.0	114	70-130			
1,2-Dichlorobenzene	21.3		µg/l		20.0	106	70-130			
1,3-Dichlorobenzene	20.7		µg/l		20.0	104	70-130			
1,4-Dichlorobenzene	20.0		µg/l		20.0	100	70-130			
Dichlorodifluoromethane (Freon12)	21.4		µg/l		20.0	107	70-130			
1,1-Dichloroethane	23.6		µg/l		20.0	118	70-130			
1,2-Dichloroethane	22.7		µg/l		20.0	113	70-130			
1,1-Dichloroethene	24.6		µg/l		20.0	123	70-130			
cis-1,2-Dichloroethene	22.9		µg/l		20.0	114	70-130			
trans-1,2-Dichloroethene	23.6		µg/l		20.0	118	70-130			
1,2-Dichloropropane	22.1		µg/l		20.0	110	70-130			
1,3-Dichloropropane	21.9		µg/l		20.0	110	70-130			
2,2-Dichloropropane	28.4	QC2	µg/l		20.0	142	70-130			
1,1-Dichloropropene	21.6		µg/l		20.0	108	70-130			
cis-1,3-Dichloropropene	23.6		µg/l		20.0	118	70-130			
trans-1,3-Dichloropropene	25.5		µg/l		20.0	128	70-130			
Ethylbenzene	21.7		µg/l		20.0	109	70-130			
Hexachlorobutadiene	21.4		µg/l		20.0	107	70-130			
2-Hexanone (MBK)	21.5		µg/l		20.0	108	70-130			
Isopropylbenzene	21.5		µg/l		20.0	107	70-130			
4-Isopropyltoluene	22.1		µg/l		20.0	110	70-130			
Methyl tert-butyl ether	24.4		µg/l		20.0	122	70-130			
4-Methyl-2-pentanone (MIBK)	20.8		µg/l		20.0	104	70-130			
Methylene chloride	23.7		µg/l		20.0	118	70-130			
Naphthalene	17.6		µg/l		20.0	88	70-130			
n-Propylbenzene	20.4		µg/l		20.0	102	70-130			
Styrene	22.1		µg/l		20.0	111	70-130			
1,1,1,2-Tetrachloroethane	22.9		µg/l		20.0	115	70-130			
1,1,2,2-Tetrachloroethane	24.0		µg/l		20.0	120	70-130			
Tetrachloroethene	21.4		µg/l		20.0	107	70-130			
Toluene	21.3		µg/l		20.0	107	70-130			
1,2,3-Trichlorobenzene	19.6		µg/l		20.0	98	70-130			
1,2,4-Trichlorobenzene	18.7		µg/l		20.0	94	70-130			
1,3,5-Trichlorobenzene	19.3		µg/l		20.0	97	70-130			
1,1,1-Trichloroethane	25.8		µg/l		20.0	129	70-130			
1,1,2-Trichloroethane	22.2		µg/l		20.0	111	70-130			
Trichloroethene	21.4		µg/l		20.0	107	70-130			
Trichlorofluoromethane (Freon 11)	24.2		µg/l		20.0	121	70-130			
1,2,3-Trichloropropane	21.5		µg/l		20.0	107	70-130			
1,2,4-Trimethylbenzene	20.4		µg/l		20.0	102	70-130			
1,3,5-Trimethylbenzene	20.8		µg/l		20.0	104	70-130			
Vinyl chloride	25.8		µg/l		20.0	129	70-130			
m,p-Xylene	42.8		µg/l		40.0	107	70-130			
o-Xylene	22.8		µg/l		20.0	114	70-130			
Tetrahydrofuran	21.9		µg/l		20.0	110	70-130			
Ethyl ether	22.8		µg/l		20.0	114	70-130			
Tert-amyl methyl ether	22.6		µg/l		20.0	113	70-130			
Ethyl tert-butyl ether	23.6		µg/l		20.0	118	70-130			
Di-isopropyl ether	22.4		µg/l		20.0	112	70-130			

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>LCS (1400027-BS1)</u>										
Tert-Butanol / butyl alcohol	252		µg/l		200	126	70-130			
1,4-Dioxane	212		µg/l		200	106	70-130			
trans-1,4-Dichloro-2-butene	23.9		µg/l		20.0	120	70-130			
Ethanol	466		µg/l		400	116	70-130			
<u>Surrogate: 4-Bromofluorobenzene</u>										
	31.4		µg/l		30.0	104	70-130			
<u>Surrogate: Toluene-d8</u>										
	30.5		µg/l		30.0	102	70-130			
<u>Surrogate: 1,2-Dichloroethane-d4</u>										
	32.2		µg/l		30.0	107	70-130			
<u>Surrogate: Dibromofluoromethane</u>										
	34.9		µg/l		30.0	116	70-130			
<u>LCS Dup (1400027-BSD1)</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	26.8	QM9	µg/l		20.0	134	70-130	9	20	
Acetone	27.1		µg/l		20.0	135	70-130	17	20	
Acrylonitrile	21.0		µg/l		20.0	105	70-130	5	20	
Benzene	22.7		µg/l		20.0	114	70-130	6	20	
Bromobenzene	21.9		µg/l		20.0	110	70-130	8	20	
Bromochloromethane	23.9		µg/l		20.0	119	70-130	0.08	20	
Bromodichloromethane	25.3		µg/l		20.0	127	70-130	0.2	20	
Bromoform	26.3	QM9	µg/l		20.0	131	70-130	5	20	
Bromomethane	25.8		µg/l		20.0	129	70-130	1	20	
2-Butanone (MEK)	22.3		µg/l		20.0	111	70-130	6	20	
n-Butylbenzene	21.6		µg/l		20.0	108	70-130	6	20	
sec-Butylbenzene	22.2		µg/l		20.0	111	70-130	6	20	
tert-Butylbenzene	22.4		µg/l		20.0	112	70-130	9	20	
Carbon disulfide	25.0		µg/l		20.0	125	70-130	0.7	20	
Carbon tetrachloride	27.1	QC2	µg/l		20.0	135	70-130	2	20	
Chlorobenzene	20.9		µg/l		20.0	104	70-130	6	20	
Chloroethane	23.3		µg/l		20.0	116	70-130	1	20	
Chloroform	23.4		µg/l		20.0	117	70-130	2	20	
Chloromethane	23.0		µg/l		20.0	115	70-130	3	20	
2-Chlorotoluene	24.6		µg/l		20.0	123	70-130	5	20	
4-Chlorotoluene	23.1		µg/l		20.0	116	70-130	2	20	
1,2-Dibromo-3-chloropropane	25.6		µg/l		20.0	128	70-130	7	20	
Dibromochloromethane	24.8		µg/l		20.0	124	70-130	0.3	20	
1,2-Dibromoethane (EDB)	23.1		µg/l		20.0	115	70-130	4	20	
Dibromomethane	23.7		µg/l		20.0	118	70-130	4	20	
1,2-Dichlorobenzene	22.2		µg/l		20.0	111	70-130	4	20	
1,3-Dichlorobenzene	22.1		µg/l		20.0	110	70-130	6	20	
1,4-Dichlorobenzene	21.4		µg/l		20.0	107	70-130	7	20	
Dichlorodifluoromethane (Freon12)	23.4		µg/l		20.0	117	70-130	9	20	
1,1-Dichloroethane	23.8		µg/l		20.0	119	70-130	0.8	20	
1,2-Dichloroethane	23.1		µg/l		20.0	116	70-130	2	20	
1,1-Dichloroethene	24.5		µg/l		20.0	123	70-130	0.1	20	
cis-1,2-Dichloroethene	23.4		µg/l		20.0	117	70-130	2	20	
trans-1,2-Dichloroethene	24.3		µg/l		20.0	122	70-130	3	20	
1,2-Dichloropropane	22.1		µg/l		20.0	110	70-130	0.1	20	
1,3-Dichloropropane	22.5		µg/l		20.0	113	70-130	3	20	
2,2-Dichloropropane	29.2	QC2	µg/l		20.0	146	70-130	2	20	
1,1-Dichloropropene	22.9		µg/l		20.0	115	70-130	6	20	
cis-1,3-Dichloropropene	24.5		µg/l		20.0	122	70-130	3	20	
trans-1,3-Dichloropropene	25.5		µg/l		20.0	127	70-130	0.3	20	
Ethylbenzene	22.8		µg/l		20.0	114	70-130	5	20	
Hexachlorobutadiene	21.6		µg/l		20.0	108	70-130	0.9	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400027 - SW846 5030 Water MS										
<u>LCS Dup (1400027-BSD1)</u>										
QM10										
<u>Prepared & Analyzed: 02-Jan-14</u>										
2-Hexanone (MBK)	21.9		µg/l		20.0	109	70-130	2	20	
Isopropylbenzene	22.8		µg/l		20.0	114	70-130	6	20	
4-Isopropyltoluene	23.0		µg/l		20.0	115	70-130	4	20	
Methyl tert-butyl ether	24.3		µg/l		20.0	122	70-130	0.2	20	
4-Methyl-2-pentanone (MIBK)	20.3		µg/l		20.0	102	70-130	3	20	
Methylene chloride	24.9		µg/l		20.0	125	70-130	5	20	
Naphthalene	18.8		µg/l		20.0	94	70-130	7	20	
n-Propylbenzene	21.2		µg/l		20.0	106	70-130	4	20	
Styrene	23.9		µg/l		20.0	120	70-130	8	20	
1,1,1,2-Tetrachloroethane	24.6		µg/l		20.0	123	70-130	7	20	
1,1,2,2-Tetrachloroethane	25.6		µg/l		20.0	128	70-130	7	20	
Tetrachloroethene	21.9		µg/l		20.0	109	70-130	2	20	
Toluene	22.4		µg/l		20.0	112	70-130	5	20	
1,2,3-Trichlorobenzene	21.4		µg/l		20.0	107	70-130	9	20	
1,2,4-Trichlorobenzene	20.2		µg/l		20.0	101	70-130	8	20	
1,3,5-Trichlorobenzene	20.6		µg/l		20.0	103	70-130	6	20	
1,1,1-Trichloroethane	27.1	QM9	µg/l		20.0	136	70-130	5	20	
1,1,2-Trichloroethane	23.6		µg/l		20.0	118	70-130	6	20	
Trichloroethene	21.3		µg/l		20.0	107	70-130	0.3	20	
Trichlorofluoromethane (Freon 11)	25.3		µg/l		20.0	126	70-130	4	20	
1,2,3-Trichloropropane	22.8		µg/l		20.0	114	70-130	6	20	
1,2,4-Trimethylbenzene	21.6		µg/l		20.0	108	70-130	6	20	
1,3,5-Trimethylbenzene	21.4		µg/l		20.0	107	70-130	3	20	
Vinyl chloride	24.0		µg/l		20.0	120	70-130	7	20	
m,p-Xylene	45.8		µg/l		40.0	114	70-130	7	20	
o-Xylene	23.0		µg/l		20.0	115	70-130	0.7	20	
Tetrahydrofuran	24.9		µg/l		20.0	125	70-130	13	20	
Ethyl ether	23.8		µg/l		20.0	119	70-130	4	20	
Tert-amyl methyl ether	23.5		µg/l		20.0	118	70-130	4	20	
Ethyl tert-butyl ether	25.1		µg/l		20.0	125	70-130	6	20	
Di-isopropyl ether	23.4		µg/l		20.0	117	70-130	5	20	
Tert-Butanol / butyl alcohol	225		µg/l		200	113	70-130	11	20	
1,4-Dioxane	240		µg/l		200	120	70-130	13	20	
trans-1,4-Dichloro-2-butene	24.2		µg/l		20.0	121	70-130	0.9	20	
Ethanol	463		µg/l		400	116	70-130	0.7	20	
Surrogate: 4-Bromofluorobenzene	31.0		µg/l		30.0	103	70-130			
Surrogate: Toluene-d8	30.4		µg/l		30.0	102	70-130			
Surrogate: 1,2-Dichloroethane-d4	32.2		µg/l		30.0	107	70-130			
Surrogate: Dibromofluoromethane	34.6		µg/l		30.0	115	70-130			
Batch 1400235 - SW846 5030 Water MS										
<u>Blank (1400235-BLK1)</u>										
<u>Prepared & Analyzed: 06-Jan-14</u>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	< 1.00		µg/l		1.00					
Acetone	< 10.0		µg/l		10.0					
Acrylonitrile	< 0.50		µg/l		0.50					
Benzene	< 1.00		µg/l		1.00					
Bromobenzene	< 1.00		µg/l		1.00					
Bromochloromethane	< 1.00		µg/l		1.00					
Bromodichloromethane	< 0.50		µg/l		0.50					
Bromoform	< 1.00		µg/l		1.00					
Bromomethane	< 2.00		µg/l		2.00					
2-Butanone (MEK)	< 10.0		µg/l		10.0					

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400235 - SW846 5030 Water MS										
<u>Blank (1400235-BLK1)</u>										
n-Butylbenzene	< 1.00		µg/l	1.00						
sec-Butylbenzene	< 1.00		µg/l	1.00						
tert-Butylbenzene	< 1.00		µg/l	1.00						
Carbon disulfide	< 2.00		µg/l	2.00						
Carbon tetrachloride	< 1.00		µg/l	1.00						
Chlorobenzene	< 1.00		µg/l	1.00						
Chloroethane	< 2.00		µg/l	2.00						
Chloroform	< 1.00		µg/l	1.00						
Chloromethane	< 2.00		µg/l	2.00						
2-Chlorotoluene	< 1.00		µg/l	1.00						
4-Chlorotoluene	< 1.00		µg/l	1.00						
1,2-Dibromo-3-chloropropane	< 2.00		µg/l	2.00						
Dibromochloromethane	< 0.50		µg/l	0.50						
1,2-Dibromoethane (EDB)	< 0.50		µg/l	0.50						
Dibromomethane	< 1.00		µg/l	1.00						
1,2-Dichlorobenzene	< 1.00		µg/l	1.00						
1,3-Dichlorobenzene	< 1.00		µg/l	1.00						
1,4-Dichlorobenzene	< 1.00		µg/l	1.00						
Dichlorodifluoromethane (Freon12)	< 2.00		µg/l	2.00						
1,1-Dichloroethane	< 1.00		µg/l	1.00						
1,2-Dichloroethane	< 1.00		µg/l	1.00						
1,1-Dichloroethene	< 1.00		µg/l	1.00						
cis-1,2-Dichloroethene	< 1.00		µg/l	1.00						
trans-1,2-Dichloroethene	< 1.00		µg/l	1.00						
1,2-Dichloropropane	< 1.00		µg/l	1.00						
1,3-Dichloropropane	< 1.00		µg/l	1.00						
2,2-Dichloropropane	< 1.00		µg/l	1.00						
1,1-Dichloropropene	< 1.00		µg/l	1.00						
cis-1,3-Dichloropropene	< 0.50		µg/l	0.50						
trans-1,3-Dichloropropene	< 0.50		µg/l	0.50						
Ethylbenzene	< 1.00		µg/l	1.00						
Hexachlorobutadiene	< 0.50		µg/l	0.50						
2-Hexanone (MBK)	< 10.0		µg/l	10.0						
Isopropylbenzene	< 1.00		µg/l	1.00						
4-Isopropyltoluene	< 1.00		µg/l	1.00						
Methyl tert-butyl ether	< 1.00		µg/l	1.00						
4-Methyl-2-pentanone (MIBK)	< 10.0		µg/l	10.0						
Methylene chloride	< 2.00		µg/l	2.00						
Naphthalene	< 1.00		µg/l	1.00						
n-Propylbenzene	< 1.00		µg/l	1.00						
Styrene	< 1.00		µg/l	1.00						
1,1,1,2-Tetrachloroethane	< 1.00		µg/l	1.00						
1,1,2,2-Tetrachloroethane	< 0.50		µg/l	0.50						
Tetrachloroethene	< 1.00		µg/l	1.00						
Toluene	< 1.00		µg/l	1.00						
1,2,3-Trichlorobenzene	< 1.00		µg/l	1.00						
1,2,4-Trichlorobenzene	< 1.00		µg/l	1.00						
1,3,5-Trichlorobenzene	< 1.00		µg/l	1.00						
1,1,1-Trichloroethane	< 1.00		µg/l	1.00						
1,1,2-Trichloroethane	< 1.00		µg/l	1.00						
Trichloroethene	< 1.00		µg/l	1.00						
Trichlorofluoromethane (Freon 11)	< 1.00		µg/l	1.00						

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400235 - SW846 5030 Water MS										
<u>Blank (1400235-BLK1)</u>										
1,2,3-Trichloropropane	< 1.00		µg/l	1.00					Prepared & Analyzed: 06-Jan-14	
1,2,4-Trimethylbenzene	< 1.00		µg/l	1.00						
1,3,5-Trimethylbenzene	< 1.00		µg/l	1.00						
Vinyl chloride	< 1.00		µg/l	1.00						
m,p-Xylene	< 2.00		µg/l	2.00						
o-Xylene	< 1.00		µg/l	1.00						
Tetrahydrofuran	< 2.00		µg/l	2.00						
Ethyl ether	< 1.00		µg/l	1.00						
Tert-amyl methyl ether	< 1.00		µg/l	1.00						
Ethyl tert-butyl ether	< 1.00		µg/l	1.00						
Di-isopropyl ether	< 1.00		µg/l	1.00						
Tert-Butanol / butyl alcohol	< 10.0		µg/l	10.0						
1,4-Dioxane	< 20.0		µg/l	20.0						
trans-1,4-Dichloro-2-butene	< 5.00		µg/l	5.00						
Ethanol	< 400		µg/l	400						
<u>Surrogate: 4-Bromofluorobenzene</u>										
Surrogate: Toluene-d8	46.5		µg/l		50.0		93	70-130		
Surrogate: 1,2-Dichloroethane-d4	49.7		µg/l		50.0		99	70-130		
Surrogate: Dibromofluoromethane	50.6		µg/l		50.0		101	70-130		
Surrogate: 51.5			µg/l		50.0		103	70-130		
<u>LCS (1400235-BS1)</u>										
Prepared & Analyzed: 06-Jan-14										
1,1,2-Trichlorotrifluoroethane (Freon 113)	18.8		µg/l		20.0		94	70-130		
Acetone	22.2		µg/l		20.0		111	70-130		
Acrylonitrile	19.2		µg/l		20.0		96	70-130		
Benzene	20.0		µg/l		20.0		100	70-130		
Bromobenzene	20.5		µg/l		20.0		102	70-130		
Bromoform	19.7		µg/l		20.0		99	70-130		
Bromochloromethane	22.5		µg/l		20.0		113	70-130		
Bromodichloromethane	23.3		µg/l		20.0		116	70-130		
Bromoform	18.8		µg/l		20.0		94	70-130		
2-Butanone (MEK)	22.2		µg/l		20.0		111	70-130		
n-Butylbenzene	19.8		µg/l		20.0		99	70-130		
sec-Butylbenzene	19.9		µg/l		20.0		99	70-130		
tert-Butylbenzene	20.1		µg/l		20.0		101	70-130		
Carbon disulfide	21.0		µg/l		20.0		105	70-130		
Carbon tetrachloride	21.8		µg/l		20.0		109	70-130		
Chlorobenzene	19.2		µg/l		20.0		96	70-130		
Chloroethane	18.5		µg/l		20.0		93	70-130		
Chloroform	20.1		µg/l		20.0		101	70-130		
Chloromethane	19.6		µg/l		20.0		98	70-130		
2-Chlorotoluene	20.9		µg/l		20.0		105	70-130		
4-Chlorotoluene	21.6		µg/l		20.0		108	70-130		
1,2-Dibromo-3-chloropropane	24.3		µg/l		20.0		122	70-130		
Dibromochloromethane	22.0		µg/l		20.0		110	70-130		
1,2-Dibromoethane (EDB)	21.7		µg/l		20.0		109	70-130		
Dibromomethane	20.3		µg/l		20.0		101	70-130		
1,2-Dichlorobenzene	20.8		µg/l		20.0		104	70-130		
1,3-Dichlorobenzene	20.0		µg/l		20.0		100	70-130		
1,4-Dichlorobenzene	19.4		µg/l		20.0		97	70-130		
Dichlorodifluoromethane (Freon12)	17.1		µg/l		20.0		86	70-130		
1,1-Dichloroethane	19.6		µg/l		20.0		98	70-130		
1,2-Dichloroethane	19.0		µg/l		20.0		95	70-130		

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400235 - SW846 5030 Water MS										
<u>LCS (1400235-BS1)</u>										
<u>Prepared & Analyzed: 06-Jan-14</u>										
1,1-Dichloroethene	20.2		µg/l		20.0	101	70-130			
cis-1,2-Dichloroethene	19.2		µg/l		20.0	96	70-130			
trans-1,2-Dichloroethene	19.7		µg/l		20.0	98	70-130			
1,2-Dichloropropane	21.1		µg/l		20.0	106	70-130			
1,3-Dichloropropane	19.8		µg/l		20.0	99	70-130			
2,2-Dichloropropane	24.7		µg/l		20.0	124	70-130			
1,1-Dichloropropene	20.3		µg/l		20.0	101	70-130			
cis-1,3-Dichloropropene	23.2		µg/l		20.0	116	70-130			
trans-1,3-Dichloropropene	24.4		µg/l		20.0	122	70-130			
Ethylbenzene	21.5		µg/l		20.0	108	70-130			
Hexachlorobutadiene	21.2		µg/l		20.0	106	70-130			
2-Hexanone (MBK)	21.3		µg/l		20.0	107	70-130			
Isopropylbenzene	20.6		µg/l		20.0	103	70-130			
4-Isopropyltoluene	22.0		µg/l		20.0	110	70-130			
Methyl tert-butyl ether	26.0		µg/l		20.0	130	70-130			
4-Methyl-2-pentanone (MIBK)	21.3		µg/l		20.0	107	70-130			
Methylene chloride	19.8		µg/l		20.0	99	70-130			
Naphthalene	21.4		µg/l		20.0	107	70-130			
n-Propylbenzene	19.8		µg/l		20.0	99	70-130			
Styrene	20.1		µg/l		20.0	101	70-130			
1,1,1,2-Tetrachloroethane	23.2		µg/l		20.0	116	70-130			
1,1,2,2-Tetrachloroethane	21.9		µg/l		20.0	110	70-130			
Tetrachloroethene	19.3		µg/l		20.0	96	70-130			
Toluene	19.4		µg/l		20.0	97	70-130			
1,2,3-Trichlorobenzene	20.7		µg/l		20.0	103	70-130			
1,2,4-Trichlorobenzene	21.0		µg/l		20.0	105	70-130			
1,3,5-Trichlorobenzene	19.7		µg/l		20.0	99	70-130			
1,1,1-Trichloroethane	22.5		µg/l		20.0	112	70-130			
1,1,2-Trichloroethane	20.6		µg/l		20.0	103	70-130			
Trichloroethene	19.0		µg/l		20.0	95	70-130			
Trichlorofluoromethane (Freon 11)	18.6		µg/l		20.0	93	70-130			
1,2,3-Trichloropropane	21.6		µg/l		20.0	108	70-130			
1,2,4-Trimethylbenzene	20.1		µg/l		20.0	100	70-130			
1,3,5-Trimethylbenzene	20.0		µg/l		20.0	100	70-130			
Vinyl chloride	17.8		µg/l		20.0	89	70-130			
m,p-Xylene	42.5		µg/l		40.0	106	70-130			
o-Xylene	21.5		µg/l		20.0	108	70-130			
Tetrahydrofuran	21.4		µg/l		20.0	107	70-130			
Ethyl ether	19.8		µg/l		20.0	99	70-130			
Tert-amyl methyl ether	16.4		µg/l		20.0	82	70-130			
Ethyl tert-butyl ether	27.9	QC2	µg/l		20.0	140	70-130			
Di-isopropyl ether	22.1		µg/l		20.0	111	70-130			
Tert-Butanol / butyl alcohol	286	QC2	µg/l		200	143	70-130			
1,4-Dioxane	233		µg/l		200	116	70-130			
trans-1,4-Dichloro-2-butene	18.8		µg/l		20.0	94	70-130			
Ethanol	392		µg/l		400	98	70-130			
Surrogate: 4-Bromofluorobenzene	50.4		µg/l		50.0	101	70-130			
Surrogate: Toluene-d8	49.8		µg/l		50.0	100	70-130			
Surrogate: 1,2-Dichloroethane-d4	47.8		µg/l		50.0	96	70-130			
Surrogate: Dibromofluoromethane	49.8		µg/l		50.0	100	70-130			
<u>LCS Dup (1400235-BS1D)</u>										
<u>Prepared & Analyzed: 06-Jan-14</u>										

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400235 - SW846 5030 Water MS										
<u>LCS Dup (1400235-BSD1)</u>										
<i>Prepared & Analyzed: 06-Jan-14</i>										
1,1,2-Trichlorotrifluoroethane (Freon 113)	17.6		µg/l		20.0	88	70-130	6	20	
Acetone	22.3		µg/l		20.0	112	70-130	0.4	20	
Acrylonitrile	19.1		µg/l		20.0	95	70-130	0.9	20	
Benzene	19.8		µg/l		20.0	99	70-130	1	20	
Bromobenzene	19.5		µg/l		20.0	98	70-130	5	20	
Bromoform	19.8		µg/l		20.0	99	70-130	0.6	20	
Bromochloromethane	22.4		µg/l		20.0	112	70-130	0.8	20	
Bromodichloromethane	22.6		µg/l		20.0	113	70-130	3	20	
Bromoform	18.6		µg/l		20.0	93	70-130	0.9	20	
Bromomethane	21.3		µg/l		20.0	107	70-130	4	20	
n-Butylbenzene	18.9		µg/l		20.0	95	70-130	4	20	
sec-Butylbenzene	18.7		µg/l		20.0	94	70-130	6	20	
tert-Butylbenzene	19.5		µg/l		20.0	97	70-130	3	20	
Carbon disulfide	20.0		µg/l		20.0	100	70-130	5	20	
Carbon tetrachloride	21.5		µg/l		20.0	108	70-130	1	20	
Chlorobenzene	18.7		µg/l		20.0	94	70-130	3	20	
Chloroethane	18.7		µg/l		20.0	94	70-130	1	20	
Chloroform	19.7		µg/l		20.0	98	70-130	2	20	
Chloromethane	19.4		µg/l		20.0	97	70-130	1	20	
2-Chlorotoluene	20.2		µg/l		20.0	101	70-130	4	20	
4-Chlorotoluene	21.2		µg/l		20.0	106	70-130	2	20	
1,2-Dibromo-3-chloropropane	24.2		µg/l		20.0	121	70-130	0.5	20	
Dibromochloromethane	22.2		µg/l		20.0	111	70-130	0.6	20	
1,2-Dibromoethane (EDB)	22.2		µg/l		20.0	111	70-130	2	20	
Dibromomethane	20.8		µg/l		20.0	104	70-130	2	20	
1,2-Dichlorobenzene	20.7		µg/l		20.0	103	70-130	0.8	20	
1,3-Dichlorobenzene	19.7		µg/l		20.0	99	70-130	1	20	
1,4-Dichlorobenzene	19.1		µg/l		20.0	96	70-130	2	20	
Dichlorodifluoromethane (Freon12)	16.2		µg/l		20.0	81	70-130	5	20	
1,1-Dichloroethane	20.1		µg/l		20.0	101	70-130	3	20	
1,2-Dichloroethane	19.5		µg/l		20.0	98	70-130	3	20	
1,1-Dichloroethene	19.1		µg/l		20.0	95	70-130	6	20	
cis-1,2-Dichloroethene	19.7		µg/l		20.0	98	70-130	2	20	
trans-1,2-Dichloroethene	19.0		µg/l		20.0	95	70-130	3	20	
1,2-Dichloropropane	20.7		µg/l		20.0	104	70-130	2	20	
1,3-Dichloropropane	20.5		µg/l		20.0	103	70-130	3	20	
2,2-Dichloropropane	23.8		µg/l		20.0	119	70-130	4	20	
1,1-Dichloropropene	19.4		µg/l		20.0	97	70-130	4	20	
cis-1,3-Dichloropropene	23.8		µg/l		20.0	119	70-130	3	20	
trans-1,3-Dichloropropene	24.8		µg/l		20.0	124	70-130	2	20	
Ethylbenzene	20.9		µg/l		20.0	105	70-130	3	20	
Hexachlorobutadiene	21.0		µg/l		20.0	105	70-130	0.9	20	
2-Hexanone (MBK)	22.1		µg/l		20.0	110	70-130	3	20	
Isopropylbenzene	19.9		µg/l		20.0	100	70-130	3	20	
4-Isopropyltoluene	21.3		µg/l		20.0	106	70-130	4	20	
Methyl tert-butyl ether	26.7	QM9	µg/l		20.0	133	70-130	3	20	
4-Methyl-2-pentanone (MIBK)	23.1		µg/l		20.0	115	70-130	8	20	
Methylene chloride	20.0		µg/l		20.0	100	70-130	1	20	
Naphthalene	21.3		µg/l		20.0	107	70-130	0.3	20	
n-Propylbenzene	18.8		µg/l		20.0	94	70-130	5	20	
Styrene	19.9		µg/l		20.0	100	70-130	1	20	
1,1,1,2-Tetrachloroethane	22.7		µg/l		20.0	113	70-130	2	20	

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Volatile Organic Compounds - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400235 - SW846 5030 Water MS										
<u>LCS Dup (1400235-BSD1)</u>										
						<u>Prepared & Analyzed: 06-Jan-14</u>				
1,1,2,2-Tetrachloroethane	21.5		µg/l		20.0	107	70-130	2	20	
Tetrachloroethene	18.7		µg/l		20.0	93	70-130	3	20	
Toluene	19.4		µg/l		20.0	97	70-130	0.05	20	
1,2,3-Trichlorobenzene	22.6		µg/l		20.0	113	70-130	9	20	
1,2,4-Trichlorobenzene	20.6		µg/l		20.0	103	70-130	2	20	
1,3,5-Trichlorobenzene	18.9		µg/l		20.0	95	70-130	4	20	
1,1,1-Trichloroethane	21.1		µg/l		20.0	106	70-130	6	20	
1,1,2-Trichloroethane	21.2		µg/l		20.0	106	70-130	3	20	
Trichloroethene	18.4		µg/l		20.0	92	70-130	3	20	
Trichlorofluoromethane (Freon 11)	17.8		µg/l		20.0	89	70-130	5	20	
1,2,3-Trichloropropane	21.1		µg/l		20.0	105	70-130	3	20	
1,2,4-Trimethylbenzene	19.4		µg/l		20.0	97	70-130	4	20	
1,3,5-Trimethylbenzene	19.2		µg/l		20.0	96	70-130	4	20	
Vinyl chloride	16.9		µg/l		20.0	84	70-130	6	20	
m,p-Xylene	41.1		µg/l		40.0	103	70-130	3	20	
o-Xylene	20.8		µg/l		20.0	104	70-130	3	20	
Tetrahydrofuran	21.1		µg/l		20.0	106	70-130	1	20	
Ethyl ether	19.9		µg/l		20.0	100	70-130	0.6	20	
Tert-amyl methyl ether	17.2		µg/l		20.0	86	70-130	5	20	
Ethyl tert-butyl ether	28.7	QC2	µg/l		20.0	143	70-130	3	20	
Di-isopropyl ether	22.1		µg/l		20.0	110	70-130	0.2	20	
Tert-Butanol / butyl alcohol	278	QC2	µg/l		200	139	70-130	3	20	
1,4-Dioxane	232		µg/l		200	116	70-130	0.3	20	
trans-1,4-Dichloro-2-butene	19.5		µg/l		20.0	98	70-130	4	20	
Ethanol	406		µg/l		400	102	70-130	4	20	
Surrogate: 4-Bromofluorobenzene	49.6		µg/l		50.0	99	70-130			
Surrogate: Toluene-d8	50.3		µg/l		50.0	101	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.4		µg/l		50.0	97	70-130			
Surrogate: Dibromofluoromethane	50.6		µg/l		50.0	101	70-130			

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Soluble Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400310 - SW846 3005A										
<u>Blank (1400310-BLK1)</u>										
Iron	< 0.0150		mg/l	0.0150						
Manganese	< 0.0020		mg/l	0.0020						
Sodium	< 0.250		mg/l	0.250						
Arsenic	< 0.0040		mg/l	0.0040						
Barium	< 0.0050		mg/l	0.0050						
Chromium	< 0.0050		mg/l	0.0050						
Zinc	< 0.0150		mg/l	0.0150						
Lead	< 0.0075		mg/l	0.0075						
Nickel	< 0.0050		mg/l	0.0050						
Cadmium	< 0.0025		mg/l	0.0025						
Copper	< 0.0050		mg/l	0.0050						
<u>LCS (1400310-BS1)</u>										
Iron	1.34		mg/l	0.0150	1.25	107	85-115			
Sodium	6.62		mg/l	0.250	6.25	106	85-115			
Manganese	1.35		mg/l	0.0020	1.25	108	85-115			
Barium	1.35		mg/l	0.0050	1.25	108	85-115			
Chromium	1.34		mg/l	0.0050	1.25	107	85-115			
Zinc	1.26		mg/l	0.0150	1.25	100	85-115			
Lead	1.24		mg/l	0.0075	1.25	99	85-115			
Cadmium	1.25		mg/l	0.0025	1.25	100	85-115			
Copper	1.35		mg/l	0.0050	1.25	108	85-115			
Arsenic	1.30		mg/l	0.0040	1.25	104	85-115			
Nickel	1.23		mg/l	0.0050	1.25	98	85-115			
<u>LCS Dup (1400310-BSD1)</u>										
Iron	1.33		mg/l	0.0150	1.25	106	85-115	1	20	
Manganese	1.32		mg/l	0.0020	1.25	105	85-115	2	20	
Sodium	6.64		mg/l	0.250	6.25	106	85-115	0.4	20	
Barium	1.33		mg/l	0.0050	1.25	106	85-115	2	20	
Cadmium	1.26		mg/l	0.0025	1.25	101	85-115	1	20	
Chromium	1.34		mg/l	0.0050	1.25	107	85-115	0.1	20	
Copper	1.38		mg/l	0.0050	1.25	110	85-115	2	20	
Nickel	1.24		mg/l	0.0050	1.25	99	85-115	1	20	
Lead	1.25		mg/l	0.0075	1.25	100	85-115	1	20	
Zinc	1.27		mg/l	0.0150	1.25	102	85-115	1	20	
Arsenic	1.32		mg/l	0.0040	1.25	105	85-115	1	20	
<u>Duplicate (1400310-DUP1)</u>										
					Source: SB82699-04					
Iron	0.110		mg/l	0.0150		0.107		3	20	
Manganese	0.0284		mg/l	0.0020		0.0276		3	20	
Sodium	30.6		mg/l	0.250		30.2		1	20	
Nickel	0.0026	J	mg/l	0.0050		0.0025		4	20	
Arsenic	< 0.0040		mg/l	0.0040		BRL				20
Barium	0.0200		mg/l	0.0050		0.0193		4	20	
Cadmium	< 0.0025		mg/l	0.0025		BRL				20
Chromium	< 0.0050		mg/l	0.0050		BRL				20
Copper	0.0028	J	mg/l	0.0050		0.0028		0	20	
Lead	< 0.0075		mg/l	0.0075		BRL				20
Zinc	0.0096	J,R06	mg/l	0.0150		0.0094		2	20	
<u>Matrix Spike (1400310-MS1)</u>										
					Source: SB82699-04					
Iron	1.41		mg/l	0.0150	1.25	0.107	104	75-125		
Sodium	37.4		mg/l	0.250	6.25	30.2	114	75-125		
Manganese	1.38		mg/l	0.0020	1.25	0.0276	108	75-125		

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Soluble Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1400310 - SW846 3005A										
<u>Matrix Spike (1400310-MS1)</u>										
Copper										
1.33										
Arsenic										
1.30										
Barium										
1.35										
Chromium										
1.32										
Nickel										
1.20										
Lead										
1.20										
Zinc										
1.24										
Cadmium										
1.22										
<u>Matrix Spike Dup (1400310-MSD1)</u>										
Manganese										
1.30										
Iron										
1.40										
Sodium										
37.1										
Lead										
1.21										
Copper										
1.35										
Zinc										
1.26										
Nickel										
1.21										
Chromium										
1.31										
Cadmium										
1.24										
Barium										
1.32										
Arsenic										
1.31										
<u>Post Spike (1400310-PS1)</u>										
Sodium										
37.6										
Iron										
1.44										
Manganese										
1.37										
Arsenic										
1.32										
Zinc										
1.27										
Lead										
1.23										
Nickel										
1.22										
Copper										
1.34										
Chromium										
1.33										
Barium										
1.37										
Cadmium										
1.25										

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Notes and Definitions

QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM10	LCS/LCSD were analyzed in place of MS/MSD.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
R06	IMRL raised to correlate to batch QC reporting limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

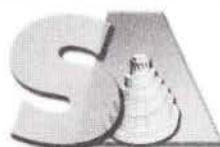
Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Kimberly Wisk



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

SB 82699 x4

Special Handling:

- Standard TAT - 7 to 10 business days
- Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ENVIRON
3 Carlisle Rd Suite 210
Westford MA

Telephone #: 603-703-5534

Project Mgr. John Noble

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= Deionized Water 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater

O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air

X1= Trip Blank X2= Equipment Blank X3=

Invoice To: Kris Sibinga
Envirite Corporation
PO Box 591
Chappaqua NY 10514
P.O. No.: RQN: 7694

Project No.: 08-14218G2

Site Name: Envirite RCRA Landfill

Location: Thomaston State: CT

Sampler(s): Luke C/

List preservative code below:

2, 4

QA/QC Reporting Notes:

* additional charges may apply

MA DEP MCP CAM Report: Yes No
CT DPH RCP Report: Yes No

QA/QC Reporting Level

- Standard No QC DQA*
- NY ASP A* NY ASP B*
- NJ Reduced* NJ Full*
- TIER II* TIER V*

Other CT RCP CT RSRS

State-specific reporting standards:

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses:
SB82699-TB-20131227	EB-20131227	12/27/13	1000	G	X1	1				X
02	EB-20131227		1200	I	X2	3		1		X X
03	SW-NR-1/20131227	(4)	1030	(4)	SW	3		1		X X
04	SW-NR-2/20131227		1050	(4)	SW	3		1		X X
✓ 05	SW-BB-1/20131227		1140		SW	3		1		X X
✓ 06	SW-BB-2/20131227	12/27/13	1120	G	SW	3		1		X X

Vols 82699
As, Ba, Cd, Cr, Cu, Fe,
Pb, Mn, Na, Ni, Zn

Field Filtered

Field Filtered

Field Filtered

Field Filtered

Field Filtered

08/11/02 IR01
JUL 12/30

Relinquished by:	Received by:	Date:	Time:	Temp °C
		12/30/13	1:28	
		12/30/13	1710	

EDD Format Environ Equis 4-file

E-mail to jnoble@environcorp.com

Ambient Iced Refrigerated Fridge temp ____°C Freezer temp ____°C

Appendix C

Groundwater Elevation Data Forms, July 25, 2013 and October 31, 2013

GROUNDWATER ELEVATION DATA

SITE: ENVIRITE RCRA Landfill
LOCATION: Old Waterbury Road, Thomaston, CT
DATE: 7/25/2013
PERSONNEL: John Noble & Luke Chmielecki

Well	Screened Interval		Type	Ground Elevation (feet)	TOC Elevation (feet)	Stickup (feet)	Depth to Water (ft BTOP)	Groundwater Elevation (feet)	Vertical Gradient (feet/foot)	Comments
	Top (feet bgs)	Bottom (feet bgs)								
MW-30	38	48	DOB	342.13	341.74	-0.39	17.33	324.41	NA	
MW-31S	17	27	OB	340.13	340.29	0.16	15.85	324.44	0.0028	
MW-31D	26.5	31.5	DOB	339.90	341.77	1.87	17.35	324.42	0.1254	
MW-31B	37	47	BR	339.90	341.79	1.89	19.00	322.79		
MW-32S	14	24	OB	340.06	340.66	0.60	15.65	325.01	0.0243	
MW-32D	24.5	39.5	DOB	339.87	340.37	0.50	15.68	324.69		
MW-33	15	25	OB	339.05	340.47	1.42	18.17	322.30		
MW-36	21.5	31.5	DOB	326.77	328.74	1.97	6.41	322.33		Tubing and bailer wedged in well/Could not remove
MW-37D	27	32	DOB	325.55	327.53	1.98	5.43	322.10	-0.0029	
MW-37B	55.7	65.7	BR	325.53	327.39	1.86	5.20	322.19		
MW-41S	10	20	OB	332.94	334.73	1.79	12.01	322.72	-0.0232	
MW-41D	17	32	OB	332.94	334.48	1.54	11.54	322.94	0.0031	
MW-41B	45	55	BR	332.83	334.61	1.78	11.75	322.86		
MW-42S	22.5	32.5	OB	339.55	341.16	1.61	18.86	322.30	-0.0079	
MW-42B	65	75	BR	340.09	342.15	2.06	19.52	322.63		
MW-43S	22.5	32.5	OB	339.26	340.41	1.15	18.30	322.11	-0.0006	
MW-43D	58	68	DOB	339.21	340.65	1.44	18.52	322.13		
MW-44S	17	27	OB	337.97	338.63	0.66	16.40	322.23	-0.0002	
MW-44D	62	72	OB	338.01	339.23	1.22	16.99	322.24	-0.0038	
MW-44B	75	85	BR	337.73	340.29	2.56	18.00	322.29		
MW-50S	13.7	18.7	OB	336.30	337.69	1.39	13.39	324.30		
MW-51D	18.3	28.3	OB	340.79	340.41	-0.38	16.53	323.88	-0.0192	
MW-51B	38.5	48.5	BR	340.73	340.27	-0.46	16.00	324.27		
MW-52D	43.5	58.5	OB	342.86	342.47	-0.39	N/M			Bailer and tubing wedged in well
MW-53D	25	40	OB	338.18	339.77	1.59	15.29	324.48		
MW-55B	15	25	BR	339.81	341.28	1.47	15.77	325.51		
MW-56S	7.0	12.0	OB				N/M			Well located off Site on Thomaston POTW property
MW-56D	49	54	OB				N/M			Well located off Site on Thomaston POTW property
MW-57	7.0	12.0	OB				N/M			Well located off Site on Thomaston POTW property
MW-58S	6.0	11.0	OB				N/M			Well located off Site on Thomaston POTW property
MW-58D	68.5	75.1	OB				N/M			Well located off Site on Thomaston POTW property
MW-59S	5.0	15.0	OB				N/M			Well located off Site in Roadway
MW-59D	40	50	OB				N/M			Well located off Site in Roadway
MW-60	4	14	OB				N/M			Well located off Site in Roadway
MW-61S	14	20	OB	337.31	339.34	2.03	16.01	323.33	0.0073	
MW-61D	42	52	OB	337.34	339.36	2.02	16.25	323.11	-0.0360	
MW-61B	59	69	BR	337.38	339.54	2.16	15.82	323.72		
MW-62	19	21	OB	336.90	338.53	1.63	14.69	323.84	0.0670	
MW-62B	26	36	BR	336.86	338.61	1.75	15.51	323.10		
MW-63	14.5	24.5	OB	343.05	342.69	-0.36	17.35	325.34		

Indicates well is located across Branch Brook

Indicates well is located off Site on Thomaston POTW property and adjacent roadway

GROUNDWATER ELEVATION DATA

SITE: ENVIRITE RCRA Landfill

LOCATION: Old Waterbury Road, Thomaston, CT

DATE: 10/31/2013

PERSONNEL: Luke Chmielecki & John Underwood

Well	Screened Interval		Type	Ground Elevation (feet)	TOC Elevation (feet)	Stickup (feet)	Depth to Water (ft BTOP)	Groundwater Elevation (feet)	Vertical Gradient (feet/foot)	Comments
	Top (feet bgs)	Bottom (feet bgs)								
MW-30	38	48	DOB	342.13	341.74	-0.39	17.87	323.87	NA	
MW-31S	17	27	OB	340.13	340.29	0.16	16.15	324.14	0.0180	
MW-31D	26.5	31.5	DOB	339.90	341.77	1.87	17.76	324.01	-0.0085	
MW-31B	37	47	BR	339.90	341.79	1.89	17.67	324.12		
MW-32S	14	24	OB	340.06	340.66	0.60	15.91	324.75	0.0258	
MW-32D	24.5	39.5	DOB	339.87	340.37	0.50	15.96	324.41		
MW-33	15	25	OB	339.05	340.47	1.42	18.22	322.25		
MW-36	21.5	31.5	DOB	326.77	328.74	1.97	6.48	322.26		Tubing and bailer wedged in well/Could not remove
MW-37D	27	32	DOB	325.55	327.53	1.98	5.40	322.13	-0.0013	
MW-37B	55.7	65.7	BR	325.53	327.39	1.86	5.22	322.17		
MW-41S	10	20	OB	332.94	334.73	1.79	12.43	322.30	-0.0263	
MW-41D	17	32	OB	332.94	334.48	1.54	11.93	322.55	-0.0074	
MW-41B	45	55	BR	332.83	334.61	1.78	11.87	322.74		
MW-42S	22.5	32.5	OB	339.55	341.16	1.61	19.10	322.06	-0.0057	
MW-42B	65	75	BR	340.09	342.15	2.06	19.85	322.30		
MW-43S	22.5	32.5	OB	339.26	340.41	1.15	18.35	322.06	-0.0070	
MW-43D	58	68	DOB	339.21	340.65	1.44	18.34	322.31		
MW-44S	17	27	OB	337.97	338.63	0.66	16.51	322.12	0.0004	
MW-44D	62	72	OB	338.01	339.23	1.22	17.13	322.10	-0.0068	
MW-44B	75	85	BR	337.73	340.29	2.56	18.10	322.19		
MW-50S	13.7	18.7	OB	336.30	337.69	1.39	13.89	323.80		
MW-51D	18.3	28.3	OB	340.79	340.41	-0.38	17.97	322.44	-0.0814	
MW-51B	38.5	48.5	BR	340.73	340.27	-0.46	16.18	324.09		
MW-52D	43.5	58.5	OB	342.86	342.47	-0.39	N/M			Bailer and tubing wedged in well
MW-53D	25	40	OB	338.18	339.77	1.59	15.77	324.00		
MW-55B	15	25	BR	339.81	341.28	1.47	16.95	324.33		
MW-56S	7.0	12.0	OB				N/M			Well located off Site on Thomaston POTW property
MW-56D	49	54	OB				N/M			Well located off Site on Thomaston POTW property
MW-57	7.0	12.0	OB				N/M			Well located off Site on Thomaston POTW property
MW-58S	6.0	11.0	OB				N/M			Well located off Site on Thomaston POTW property
MW-58D	68.5	75.1	OB				N/M			Well located off Site on Thomaston POTW property
MW-59S	5.0	15.0	OB				N/M			Well located off Site in Roadway
MW-59D	40	50	OB				N/M			Well located off Site in Roadway
MW-60	4	14	OB				N/M			Well located off Site in Roadway
MW-61S	14	20	OB	337.31	339.34	2.03	16.16	323.18	0.0050	
MW-61D	42	52	OB	337.34	339.36	2.02	16.33	323.03	-0.0012	
MW-61B	59	69	BR	337.38	339.54	2.16	16.49	323.05		
MW-62	19	21	OB	336.90	338.53	1.63	15.09	323.44	-0.0127	
MW-62B	26	36	BR	336.86	338.61	1.75	15.03	323.58		
MW-63	14.5	24.5	OB	343.05	342.69	-0.36	17.67	325.02		
UNK-1	Unknown		?	334.14	N/M	-	N/M	-	-	Filled with concrete
UNK-2	Unknown	19.53	?	333.47	334.61	1.14	12.66	321.95	-	Unknown Well
UNK-3	Unknown	35.28	?	329.54	330.75	1.21	9.30	321.45	-	Unknown Well
UNK-4	Unknown	27.14	?	338.22	339.75	1.53	17.72	322.03	-	Unknown Well

Indicates well is located across Branch Brook

Indicates well is located off Site on Thomaston POTW property and adjacent roadway

Appendix D

2012 Groundwater Quality Data/Vanasse Hangen Brustlin, Inc.

TABLE 1 - SUMMARY OF GROUNDWATER DATA, PH AND SPECIFIC CONDUCTIVITY

Thomaston Landfill (Envirite)
2012 Annual Report

Well	Date	Reference Elevation	Depth to Water	Water Elevation	pH	Specific Conductivity ($\mu\text{mhos}/\text{cm}$)
MW-30	3/26/2012	341.71	17.40	324.31	7.12	539
	8/7/2012	341.71	17.51	324.20	7.07	536
	12/3/2012	341.71	17.42	324.29	NM	NM
MW-31S	3/26/2012	340.30	NM	NM	6.60	1720
	8/7/2012	340.30	15.96	324.34	6.61	1380
	12/3/2012	340.30	15.83	324.47	NM	NM
MW-33	3/26/2012	340.49	17.64	322.85	7.09	123
	8/7/2012	340.49	17.31	323.18	6.95	289
	12/3/2012	340.49	16.94	323.55	6.15	270
MW-36	3/26/2012	329.00	NM	NM	6.81	312
	8/7/2012	329.00	NM	NM	6.82	306
	12/3/2012	329.00	NM	NM	NM	NM
MW-41B	3/26/2012	335.26	15.48	319.78	7.46	1190
	8/7/2012	335.26	13.57	321.69	7.46	1180
	12/3/2012	335.26	13.53	321.73	5.54	1300
MW-41D	3/26/2012	335.26	11.66	323.60	6.75	847
	8/7/2012	335.26	11.58	323.68	6.72	708
	12/3/2012	335.26	11.48	323.78	4.38	810
MW-41S	3/26/2012	334.41	12.10	322.31	6.67	429
	8/7/2012	334.41	12.04	322.37	6.59	547
	12/3/2012	334.41	11.95	322.46	4.33	730
MW-42S	3/26/2012	340.43	18.81	321.62	6.84	849
	8/7/2012	340.43	18.59	321.84	6.82	907
	12/3/2012	340.43	18.38	322.05	4.87	850
MW-42S (dup)	3/26/2012	340.43	18.81	321.62	6.82	850
	8/7/2012	340.43	18.59	321.84	6.86	907
	12/3/2012	340.43	18.38	322.05	4.87	850
MW-43D	3/26/2012	340.65	18.51	322.14	6.45	1620
	8/7/2012	340.65	17.97	322.68	6.30	830
	12/3/2012	340.65	17.70	322.95	4.94	680
MW-43S	3/26/2012	340.43	18.12	322.31	6.75	2080
	8/7/2012	340.43	17.80	322.63	6.73	1860
	12/3/2012	340.43	17.51	322.92	5.38	950
MW-44B	3/26/2012	339.28	17.7	321.58	7.15	1150
	8/7/2012	339.28	17.4	321.88	6.80	824
	12/3/2012	339.28	17.07	322.21	7.20	680
MW-44D	3/26/2012	340.33	16.73	323.60	7.05	800
	8/7/2012	340.33	16.42	323.91	6.99	388
	12/3/2012	340.33	16.05	324.28	5.53	430
Upstream	3/26/2012	NA	NM	NA	7.36	120
	8/7/2012	NA	NM	NA	7.30	116
	12/3/2012	NA	NM	NA	NM	NM
Downstream	3/26/2012	NA	NM	NA	7.31	124
	8/7/2012	NA	NM	NA	7.24	118
	12/3/2012	NA	NM	NA	NM	NM

Notes:
NA = Not Applicable
NM = Not Measured
All elevations and depths are measured in feet.

TABLE 2. SUMMARY OF ANALYTICAL RESULTS, GB WELLS

1st Quarter Sampling Event
 Envrite Landfill, Thomaston, CT
 2012 Annual Report

CTDEEP CRITERIA (ug/L)				WELL Date Reference Elevations		MW-30	MW-31S	MW-33	MW-41S	MW-41D	MW-41B	MW-42S	MW-42S (dup)	MW-43S	MW-43D	MW-44D	MW-44B
RVC	2 x RVC	IVC	2 x IVC	SWPC		3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	3/26/12	
ug/L	ug/L	ug/L	ug/L	ug/L	Field Parameters	341.71	340.30	340.49	334.41	335.26	335.26	340.43	340.43	340.43	340.65	340.33	339.28
					Depth to Water	17.40	NM	17.64	12.10	11.66	15.48	18.81	18.81	18.12	18.51	16.73	17.7
					Water Level Elevation (feet)	324.31	NM	322.85	322.31	323.60	319.78	321.62	321.62	322.31	322.14	323.60	321.58
					pH (standard units)	7.12	6.60	7.09	6.67	6.75	7.46	6.84	6.82	6.75	6.45	7.05	7.15
					Specific Conductance (umhos/cm)	539	1720	123	429	847	1190	849	850	2080	1620	800	1150
					Volatile Organic Compounds ^a												
6,500	13,000	16,000	32,000	62,000	1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL							
1.8	3.6	54	108	110	1,1,2,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL							
220	440	2,900	5,800	1,260	1,1-Dichloroethane	BDL	BDL	BDL	BDL	BDL							
3,000	6,000	41,000	82,000	NE	1,1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL							
190	380	920	1,840	96	1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL							
5,100	10,200	50,000	100,000	170,000	1,2-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL							
6.5	13	68	136	2,970	1,2-Dichloroethane	BDL	BDL	BDL	BDL	BDL							
7.4	15	58	116	NE	1,2-Dichloropropene	BDL	BDL	BDL	BDL	BDL							
4,300	8,600	50,000	100,000	26,000	1,2,3-Trichloropropene	BDL	BDL	BDL	BDL	BDL							
1,400	2,800	3,400	6,800	26,000	1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL							
360	720	4,800	9,600	NE	1,2,4-Trimethylbenzene	BDL	380	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
280	560	3,900	7,800	NE	1,3,5-Trimethylbenzene	BDL	120	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3,100	6,200	42,000	84,000	NE	Styrene	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	2-Hexanone	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	2-Chlorophenyl vinyl ether	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	4-Methyl-2-pentanone	BDL	7300	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
50,000	100,000	50,000	100,000	NE	Acetone	BDL	1,400	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NE	NE	NE	NE	NE	Acrolein	NT	NT	NT	NT	NT							
NE	NE	NE	NE	20	Acrylonitrile	BDL	BDL	BDL	BDL	BDL							
130	260	310	620	710	Benzene	BDL	BDL	BDL	BDL	BDL							
2.3	5	73	146	NE	Bromodichloromethane	BDL	BDL	BDL	BDL	BDL							
75	150	2,300	4,600	10,800	Bromoform	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	Bromomethane	BDL	BDL	BDL	BDL	BDL							
5.3	11	14	28	132	Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL							
1,800	3,600	23,000	46,000	420,000	Chlorobenzene	BDL	BDL	BDL	BDL	BDL							
12,000	24,000	29,000	58,000	NE	Chloroethane	BDL	BDL	BDL	BDL	BDL							
26	52	62	124	14,100	Chloroform	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	Chloromethane	BDL	BDL	BDL	BDL	BDL							
830	1,660	11,000	22,000	NE	cis-1,2-Dichloroethene	10	1,100	BDL	15	65	74	11	9.5	3.4	22	13	22
6	12	25	50	34,000	cis-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	1,020	trans-1,2-Dichloroethene	BDL	BDL	BDL	BDL	BDL							
2,700	5,400	36,000	72,000	580,000	trans-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL							
2,800	5,600	6,800	13,600	NE	Dibromochloromethane	BDL	BDL	BDL	BDL	BDL							
160	320	2,200	4,400	48,000	Ethylbenzene	BDL	2,700	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NE	NE	NE	NE	NE	Isopropylbenzene	BDL	130	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NE	NE	NE	NE	NE	Methylene Chloride	BDL	BDL	BDL	BDL	BDL							
21,000	42,000	50,000	100,000	NE	Methyl ethyl ketone	BDL	3,000	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
NE	NE	NE	NE	NE	Methyl t-butyl ether (MTBE)	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	Naphthalene	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	n-Propylbenzene	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	NE	p-Isopropyltoluene	BDL	BDL	BDL	BDL	BDL							
1,500	3,000	20,000	40,000	710	sec-Butylbenzene	BDL	BDL	BDL	BDL	BDL							
NE	NE	NE	NE	710	tert-Butylbenzene	BDL	BDL	BDL	BDL	BDL							
340	680	810	1,620	88	Tetrachloroethylene	8.9	BDL	4.5	16	5.4	12	5.4	8.8	4.8	6.8		
NE	NE	NE	NE	NE	Tetrahydrofuran	BDL	320	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7,100	14,200	41,000	82,000	4,000,000	Toluene	BDL	8,200	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
1,000	2,000	13,000	26,000	NE	trans-1,2-Dichloroethene	BDL	BDL	BDL	BDL	BDL							
6	12	25	50	34,000	trans-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL							
27	54	67	134	2,340	Trichloroethene	8.5	BDL	BDL	6.6	29	21	12	3.9	14	8.3	16	
NE	NE	NE	NE	NE	Trichlorofluoromethane	BDL	BDL	BDL	BDL	BDL							
1.6	3.2	52	104	15,760	Vinyl Chloride	BDL	140	BDL	BDL	1.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8,700	17,400	48,000	96,000	NE	Xylenes	BDL	11,500	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
					Metals												
NE	NE	NE	NE	NE	Barium, Dissolved	3.0	167	21	73	99	45	77	77	35	16	33	19
NE	NE	NE	NE	6	Cadmium, Dissolved	BDL	BDL	BDL	BDL	BDL	1	BDL	1	BDL	1	BDL	BDL
NE	NE	NE	NE	48	Chromium, Dissolved	BDL	87	BDL	BDL	BDL	2	3	BDL	BDL	BDL	BDL	BDL
NE	NE	NE	NE	NE	Copper, Dissolved	BDL	BDL	BDL	5	BDL	24	23	20	179	BDL	BDL	BDL
NE	NE	NE	NE	NE	Iron, Dissolved	BDL	88,000	BDL	54	BDL	BDL	BDL	BDL	17	BDL	11	BDL
NE	NE	NE	NE	NE	Manganese, Dissolved	129	13,100	BDL	57	1,560	41	5	5	46	451	42	464
NE	NE	NE	NE	880	Nickel, Dissolved	2	214	BDL	4	4	5	47	48	21	59	8	36
NE	NE	NE	NE	NE	Sodium, Dissolved	47,900	62,800	12,600	43,500	59,400	46,700	55,000	55,000	41,500	151,000	74,600	108,000
NE	NE	NE	NE	123	Zinc, Dissolved	3	739	BDL	42	4	14	117	115	32	177	26	79
					Indicator Parameters												
NE	NE	NE	NE	NE	Ammonia Nitrogen	1,700	36,800	40	70	50	40	70	50	60	160	50	50
NE	NE	NE	NE	NE	Chloride, Water	92,000	200,000	5,300	60,100	105,000	123,000	86,700	89,400	286,000	229,000	118,000	172,000
NE	NE	NE	NE	NE	Dissolved Parameter Filteration Method 624, Water												
NE	NE	NE	NE	52	Cyanide, Water	BDL	40	BDL	BDL	BDL	BDL	BDL	BDL	190	BDL	BDL	BDL
NE	NE	NE	NE	NE	Nitrate Nitrogen, Water	3,020	BDL	1,920									

2nd Quarter Sampling Event
 Envrite Landfill, Thomaston, CT
 2012 Annual Report

CTDEEP CRITERIA (ug/L)					WELL Reference Elevation	Date	MW-30	MW-31S	MW-33	MW-41S	MW-41D	MW-41B	MW-42S	MW-42S (dup)	MW-43S	MW-43D	MW-44D	MW-44B
RVC	2 x RVC	IVC	2 x IVC	SWPC			8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	8/7/12	
ug/L	ug/L	ug/L	ug/L	ug/L														
					Field Parameters													
					Depth to Water	17.51	15.96	17.31	12.04	11.58	13.57	18.59	18.59	17.80	17.97	16.42	17.4	
					Water Level Elevation (feet)	324.20	324.34	323.18	322.37	323.68	321.69	321.84	321.84	322.63	322.68	323.91	321.88	
					pH (standard units)	7.07	6.61	6.95	6.59	6.72	7.46	6.82	6.86	6.73	6.30	6.99	6.80	
					Specific Conductance (umhos/cm)	536	1380	289	547	708	1180	907	907	1860	830	388	824	
					Volatile Organic Compounds													
6,500	13,000	16,000	32,000	62,000	1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1.8	3.6	54	108	110	1,1,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
220	440	2,900	5,800	1,260	1,1,2-Trichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3,000	6,000	41,000	82,000	NE	1,1-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
190	380	920	1,840	96	1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
5,100	10,200	50,000	100,000	170,000	1,2-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6.5	13	68	136	2,970	1,2-Dichloropropane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7.4	15	58	116	NE	1,2,3-Trichloropropene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
4,300	8,600	50,000	100,000	26,000	1,3-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,400	2,800	3,400	6,800	26,000	1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
360	720	4,800	9,600	NE	1,2,4-Trimethylbenzene	BDL	330	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
280	560	3,900	7,800	NE	1,3,5-Trimethylbenzene	BDL	110	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3,100	6,200	42,000	84,000	NE	Styrene	BDL	29	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	2-Hexanone	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	2-Chloroethyl vinyl ether	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	4-Methyl-2-pentanone	BDL	22,000	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
50,000	100,000	50,000	100,000	NE	Acetone	BDL	440	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Acrolein	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
NE	NE	NE	NE	20	Acrylonitrile	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
130	260	310	620	710	Benzene	BDL	110	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
2,3	5	73	146	NE	Bromodichloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
75	150	2,300	4,600	10,800	Bromoform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Bromomethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
5.3	11	14	28	132	Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,800	3,600	23,000	46,000	420,000	Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
12,000	24,000	29,000	58,000	NE	Chloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
26	52	62	124	14,100	Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Chloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
830	1,660	11,000	22,000	NE	cis-1,2-Dichloroethene	24	2,400	BDL	34	58	65	8.7	9.9	38	27	3.6	29	
6	12	25	50	34,000	cis-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
2,700	5,400	36,000	72,000	580,000	Dibromochloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
2,800	5,600	6,800	13,600	NE	Ethylbenzene	BDL	3100	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
160	320	2,200	4,400	48,000	Isopropylbenzene	BDL	120	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Methylene Chloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
21,000	42,000	50,000	100,000	NE	Methyl t-butyl ether (MTBE)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Naphthalene	BDL	98	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	n-Propylbenzene	BDL	44	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	p-Isopropyltoluene	BDL	11	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,500	3,000	20,000	40,000	710	sec-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	710	tert-Butylbenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
340	680	810	1,620	88	Tetrachloroethylene	9.6	BDL	BDL	10	13	6.2	11	10	20	9.8	4.8	8.5	
NE	NE	NE	NE	NE	Tetrahydrofuran	BDL	560	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7,100	14,200	41,000	82,000	4,000,000	Toluene	BDL	9800	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,000	2,000	13,000	26,000	NE	trans-1,2-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	12	25	50	34,000	trans-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
27	54	67	134	2,340	Trichloroethene	BDL	BDL	BDL	17	25	25	12	11	24	18	5	19	
NE	NE	NE	NE	NE	Trichlorofluoromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1.6	3.2	52	104	15,750	Vinyl Chloride	BDL	230	BDL	BDL	1.2	BDL	BDL	BDL	2.4	BDL	BDL	BDL	
8,700	17,400	48,000	96,000	NE	Xylenes	BDL	9200	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
					Metals													
NE	NE	NE	NE	NE	Barium, Dissolved	5.0	106	33	116	93	56	100	99	29	14	23	12	
NE	NE	NE	NE	6	Cadmium, Dissolved	BDL	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	110 (Cr VI)	Chromium, Dissolved	BDL	68	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	48	Copper, Dissolved	BDL	83	BDL	BDL	BDL	BDL	27	27	22	281	BDL	BDL	
NE	NE	NE	NE	NE	Iron, Dissolved	BDL	56,200	BDL	197	28	BDL	15	BDL	12	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Manganese, Dissolved	22	9,940	BDL	64	1,450	16	4	4	245	580	2	361	
NE	NE	NE	NE	880	Nickel, Dissolved	BDL	43	BDL	5	3	4	56	53	20	74	2	26	
NE	NE	NE	NE	NE	Sodium, Dissolved	43,500	58,900	7,790	47,500	56,900	42,900	61,800	61,700	172,000	97,100	41,300	105,000	
NE	NE	NE	NE	123	Zinc, Dissolved	5	708	BDL	90	5	11	135	134	23	229	11	53	
					Indicator Parameters													
NE	NE	NE	NE	NE	Ammonia Nitrogen	1,420	28,800	60	50	50	40	20	50	40	1,030	20	80	
NE	NE	NE	NE	NE	Chloride, Water	177,000	192,000	38,800	84,100	90,500	134,000	123,000	129,000	292,000	128,000	67,500	121,000	
NE	NE	NE	NE	NE	Dissolved Parameter Filtration													
NE	NE	NE	NE	NE	Method 624, Water													
NE	NE	NE	NE	NE	Cyanide, Water	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Nitrate Nitrogen, Water	4,710	BDL	8,370	6,700	7,810	16,800	15,400	15,400	36,200	9,840	1,390	10,500	
NE	NE	NE	NE	NE	Nitrite Nitrogen, Water	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Phenols, Water	BDL	885	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Sulfate, Water	37,500</												

CTDEEP CRITERIA (ug/L)				WELL Reference Elevation	Date	MW-30	MW-31S	MW-33	MW-41S	MW-41D	MW-41B	MW-42S	JW-42S (dup)	MW-43S	MW-43D	MW-44D	MW-44B	
RVC	2 x RVC	IVC	2 x IVC			341.71	12/3/12	340.30	12/3/12	340.49	12/3/12	335.26	12/3/12	340.43	12/3/12	340.65	12/3/12	340.33
ug/L	ug/L	ug/L	ug/L	Field Parameters														
				Depth to Water	17.42	15.83	16.94	11.95	11.48	13.53	18.38	18.38	17.51	17.70	16.05	17.07		
				Water Level Elevation (feet)	324.29	324.47	323.55	322.46	323.78	321.73	322.05	322.05	322.92	322.95	324.28	322.21		
				pH (standard pH)	NM	NM	6.15	4.33	4.38	5.54	4.87	4.87	5.38	4.94	5.53	7.20		
				Specific Conductance (umhos/cm)	NM	NM	270	730	810	1300	850	850	950	950	680	430	680	
Volatile Organic Compounds																		
6,500	13,000	16,000	32,000	62,000	1,1,1-Trichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1.8	3.6	54	108	110	1,1,2,2-Tetrachloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
220	440	2,900	5,800	1,260	1,1,2-Trichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3,000	6,000	41,000	82,000	NE	1,1-Dichloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
190	380	920	1,840	96	1,1,1-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
5,100	10,200	50,000	100,000	170,000	1,2-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6.5	13.0	68	136	2,970	1,2,2-Dichloropropane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7.4	14.8	58	116	NE	1,2,3-Trichloropropane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
4,300	8,600	50,000	100,000	26,000	1,3-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,400	2,800	3,400	6,800	26,000	1,4-Dichlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
360	720	4,800	9,600	NE	1,2,4-Trimethylbenzene	BDL	320	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
280	560	3,900	7,800	NE	1,3,5-Trimethylbenzene	BDL	110	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3,100	6,200	42,000	84,000	NE	Styrene	BDL	23	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	2-Chloroethyl vinyl ether	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	4-Methyl-2-pentanone	BDL	15,000	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
50,000	100,000	50,000	100,000	NE	Acetone	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Acrolein	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
130	260	310	620	710	Acrylonitrile	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
2.3	5	73	146	NE	Bromodichloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
75	150	2,300	4,600	10,800	Bromoform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Bromomethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
5.3	11	14	28	132	Carbon Tetrachloride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,800	3,600	23,000	46,000	420,000	Chlorobenzene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
12,000	24,000	29,000	58,000	NE	Chloroethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
26	52	62	124	14,100	Chloroform	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Chloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
830	1,660	11,000	22,000	NE	cis-1,2-Dichloroethene	3.4	940	BDL	13	34	70	7.4	7.3	25	13	1.2	13	
6	12	25	50	34,000	cis-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Dibromochloromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
340	680	810	1,620	88	Tetrachloroethylene	5.9	BDL	BDL	4.6	11	5.1	10	9.8	18	5.6	3.8	7.5	
NE	NE	NE	NE	NE	Tetrahydrofuran	BDL	310	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7,100	14,200	41,000	82,000	4,000,000	Toluene	BDL	9,200	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1,000	2,000	13,000	26,000	NE	trans-1,2-Dichloroethene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	12	25	50	34,000	trans-1,3-Dichloropropene	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
27	54	67	134	2,340	Trichloroethene	3.8	BDL	BDL	6.9	19	21	9	8.8	20	9.5	2.7	13	
NE	NE	NE	NE	NE	Trichlorofluoromethane	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
1.6	3.2	52	104	15,750	Vinyl Chloride	BDL	890	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.5	BDL	BDL	
8,700	17,400	48,000	96,000	NE	Xylenes	BDL	8,400	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
Metals																		
NE	NE	NE	NE	NE	Barium, Dissolved	6	71	30	183	75	61	72	71	35	24	37	15	
NE	NE	NE	NE	6	Cadmium, Dissolved	BDL	2	BDL	2	BDL	BDL	BDL	BDL	8	BDL	1	BDL	
NE	NE	NE	NE	110 (Cr VI)	Chromium, Dissolved	BDL	61	BDL	2	BDL	2	2	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	48	Copper, Dissolved	6	46	BDL	49	BDL	7	33	31	15	168	BDL	BDL	
NE	NE	NE	NE	NE	Iron, Dissolved	BDL	61,200	BDL	168	44	BDL	25	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Manganese, Dissolved	633	7,400	BDL	160	972	42	6	6	561	416	2	247	
NE	NE	NE	NE	880	Nickel, Dissolved	9	31	BDL	25	3	4	48	50	32	55	BDL	15	
NE	NE	NE	NE	NE	Sodium, Dissolved	16,000	59,300	10,500	34,500	49,400	45,400	57,700	57,000	131,000	69,900	38,700	86,200	
NE	NE	NE	NE	123	Zinc, Dissolved	10	301	2	314	9	13	124	121	23	162	11	39	
Indicator Parameters																		
NE	NE	NE	NE	NE	Ammonia Nitrogen	3,340	19,000	60	110	70	50	30	BDL	890	480	BDL	70	
NE	NE	NE	NE	NE	Chloride, Water	305,000	217,000	6,400	53,500	73,000	127,000	94,700	95,300	214,000	110,000	62,700	93,500	
NE	NE	NE	NE	NE	Dissolved Parameter Filtration	Method 624, Water	52	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Nitrate Nitrogen, Water	43,300	BDL	3,930	12,100	3,960	15,400	12,200	12,200	25,700	6,730	380	6,530	
NE	NE	NE	NE	NE	Nitrite Nitrogen, Water	BDL	BDL	BDL	40	BDL	BDL	249,000	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Phenols, Water	BDL	880	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Sulfate, Water	202,000	8,700	21,600	63,400	103,000	311,000	135,000	135,000	249,000	83,400	38,600	85,000	
NE	NE	NE	NE	NE	Total Dissolved Solids, Water	1,100,000	1,000,000	110,000	300,000	380,000	870,000	490,000	490,000	960,000	360,000	200,000	380,000	
NE	NE	NE	NE	NE	Total Organic Carbon, Water	1,900	290,000	2,500	3,700	1,700	1,300	1,200	1,700	1,600	BDL	BDL	BDL	
NE	NE	NE	NE	NE	Total Organic Halogens, Water	117	944	14	33	71	60	26	28	52	21	15	16	
NE	NE	NE	NE	NE	Total Suspended Solids	7,000	120,000	BDL	190,000	90,000	22,000	41,000	39,000	62,000	8,500	11,000	BDL	

Notes:
 Bold and shaded fields indicate exceedence of numerical criteria
 IVC Industrial Volatilization Criteria
 RVC Residential Volatilization Criteria
 SWPC Surface Water Protection Criteria
 NE Not established
 BDL Below Detection Limit
 NA Not analyzed

* VOCs analyzed using Method 8260

TABLE 3 - SUMMARY OF ANALYTICAL RESULTS, GA WELL (MW-36)

Envirite Landfill, Thomaston, CT

2012 Annual Report

GWPC	CTDEEP CRITERIA (ug/L) ¹						WELL Date Reference Elevation	MW-36	MW-36	MW-36
	2 x GWPC	RVC	2 x RVC	IVC	2 x IVC	SWPC		3/26/12 NM	8/7/12 NM	12/3/12 NM
ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	Field Parameters			
							Depth to Water	NM	NM	NM
							Water Level Elevation (feet)	NM	NM	NM
							pH (standard units)	6.81	6.82	NM
							Specific Conductance ($\mu\text{mhos}/\text{cm}$)	312	306	NM
							Volatile Organic Compounds ²			
200	400	6,500	13,000	16,000	32,000	62,000	1,1,1-Trichloroethane	BDL	BDL	BDL
0.5	1	1.8	3.6	54	108	110	1,1,2,2-Tetrachloroethane	BDL	BDL	BDL
5	10	220	440	2,900	5,800	1,260	1,1,2-Trichloroethane	BDL	BDL	BDL
70	140	3,000	6,000	41,000	82,000	NE	1,1-Dichloroethane	BDL	BDL	BDL
7	14	190	380	920	1,840	96	1,1-Dichloroethene	BDL	BDL	BDL
600	1,200	5,100	10,200	50,000	100,000	170,000	1,2-Dichlorobenzene	BDL	BDL	BDL
1	2	6.5	13	68	136	2,970	1,2-Dichloroethane	BDL	BDL	BDL
5	10	7.4	15	58	116	NE	1,2-Dichloropropane	BDL	BDL	BDL
600	1,200	4,300	8,600	50,000	100,000	26,000	1,3-Dichlorobenzene	BDL	BDL	BDL
75	150	1,400	2,800	3,400	6,800	26,000	1,4-Dichlorobenzene	BDL	BDL	BDL
NE	NE	NE	NE	NE	NE	NE	2-Chloroethyl vinyl ether	NT	NT	NT
NE	NE	NE	NE	NE	NE	NE	Acrolein	NT	NT	NT
0.5	1	NE	NE	NE	NE	20	Acrylonitrile	BDL	BDL	BDL
1	2	130	260	310	620	710	Benzene	BDL	BDL	BDL
0.56	1	2.3	5	73	146	NE	Bromodichloromethane	BDL	BDL	BDL
4	8	75	150	2,300	4,600	10,800	Bromoform	BDL	BDL	BDL
9.8	20	NE	NE	NE	NE	NE	Bromomethane	BDL	BDL	BDL
5	10	5.3	11	14	28	132	Carbon Tetrachloride	BDL	BDL	BDL
100	200	1,800	3,600	23,000	46,000	420,000	Chlorobenzene	BDL	BDL	BDL
NE	NE	12,000	24,000	29,000	58,000	NE	Chloroethane	BDL	BDL	BDL
6	12	26	52	62	124	14,100	Chloroform	BDL	BDL	BDL
2.7	5	NE	NE	NE	NE	NE	Chloromethane	BDL	BDL	BDL
0.5	1	6	12	25	50	34,000	cis-1,3-Dichloropropene	BDL	BDL	BDL
0.5	1	NE	NE	NE	NE	1,020	Dibromochloromethane	BDL	BDL	BDL
700	1,400	2,700	5,400	36,000	72,000	580,000	Ethylbenzene	BDL	BDL	BDL
5	10	160	320	2,200	4,400	48,000	Methylene Chloride	BDL	BDL	BDL
5	10	340	680	810	1,620	88	Tetrachloroethylene	BDL	BDL	BDL
1,000	2,000	7,100	14,200	41,000	82,000	4,000,000	Toluene	BDL	BDL	BDL
100	200	1,000	2,000	13,000	26,000	NE	trans-1,2-Dichloroethene	BDL	BDL	BDL
0.5	1	6	12	25	50	34,000	trans-1,3-Dichloropropene	BDL	BDL	BDL
5	10	27	54	67	134	2,340	Trichloroethene	BDL	BDL	BDL
1,300	2,600	NE	NE	NE	NE	NE	Trichlorofluoromethane	BDL	BDL	BDL
2	4	1.6	3.2	52	104	15,750	Vinyl Chloride	BDL	BDL	BDL
							Metals			
1,000	2,000	NE	NE	NE	NE	NE	Barium, Dissolved	39	48	45
5	10	NE	NE	NE	NE	6	Cadmium, Dissolved	BDL	5	BDL
50 (Cr total)	100	NE	NE	NE	NE	110 (Cr VI)	Chromium, Dissolved	BDL	BDL	BDL
1,300	2,600	NE	NE	NE	NE	48	Copper, Dissolved	BDL	BDL	BDL
NE	NE	NE	NE	NE	NE	NE	Iron, Dissolved	BDL	54	BDL
NE	NE	NE	NE	NE	NE	NE	Manganese, Dissolved	BDL	182	12
100	200	NE	NE	NE	NE	880	Nickel, Dissolved	2	4	5
NE	NE	NE	NE	NE	NE	NE	Sodium, Dissolved	40,300	35,700	37,900
5,000	10,000	NE	NE	NE	NE	123	Zinc, Dissolved	8	42	5
						Indicator Parameters				
NE	NE	NE	NE	NE	NE	NE	Ammonia Nitrogen	40	30	BDL
NE	NE	NE	NE	NE	NE	NE	Chloride, Water	56,800	60,200	41,300
200	400	NE	NE	NE	NE	52	Cyanide, Water	BDL	BDL	BDL
NE	NE	NE	NE	NE	NE	NE	Nitrate Nitrogen, Water	560	270	670
NE	NE	NE	NE	NE	NE	NE	Nitrite Nitrogen, Water	BDL	BDL	BDL
NE	NE	NE	NE	NE	NE	NE	Phenols, Water	BDL	BDL	BDL
NE	NE	NE	NE	NE	NE	NE	Sulfate, Water	27,400	26,700	24,100
NE	NE	NE	NE	NE	NE	NE	Total Dissolved Solids, Water	170,000	180,000	150,000
NE	NE	NE	NE	NE	NE	NE	Total Organic Carbon, Water	BDL	1,200	1,300
NE	NE	NE	NE	NE	NE	NE	Total Organic Halogens, Water	16	22	BDL
NE	NE	NE	NE	NE	NE	NE	Total Suspended Solids	BDL	BDL	17,000

Notes:

GWPS	Ground Water Protection Standard
IVC	Industrial Volatilization Criteria
RVC	Residential Volatilization Criteria
SWPC	Surface Water Protection Criteria
NE	Not Established
BDL	Below Detection Limit
NM	Not Measured
NA	Not Analyzed

¹ Compliance with the IVC and RVC is demonstrated when the 95% UCL of the arithmetic mean of sample concentrations (for a minimum of 4 consecutive quarters) is less than or equal to the standard AND no single sample exceeds twice the standard. Compliance with the SWPC is demonstrated when the AVG of sample concentrations is less than or equal to the standard.

² VOCs analyzed using Method 624 as specified in Envirite's Post-Closure Plan

Appendix E

Data Validation Review Report

DATA VALIDATION REVIEW

Expanded Groundwater Monitoring Event December 2013
Envirite RCRA Facility
Old Waterbury Road
Thomaston, Connecticut

**Laboratory Sample Delivery Groups (SDGs): SB82039, SB82197, SB82287,
SB82369, SB82439 and SB82699.**

Laboratory: Spectrum Analytical Technology, Inc., Agawam, Massachusetts

Reviewer: Wendy Stonestreet

Date Reviewed: February 19, 2014

This data validation report has been prepared by ENVIRON International Corporation (ENVIRON) to assess the validity and usability of laboratory analytical data generated from samples collected during expanded groundwater monitoring event December 2013 event at the Envirite RCRA Facility in Thomaston, Connecticut, (the "site") from December 16, 2013 through December 20, 2013, December 23, 2013 and December 27, 2013.

The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following document: *Quality Assurance Project Plan (QAPP)/Sampling Analysis Plan (SAP) for the Envirite RCRA Facility, Old Waterbury Road, Thomaston, Connecticut* (December 2013), USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008), USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, (January, 2010). Analytical services for the analysis of 47 aqueous samples was provided by Spectrum Analytical, Inc. (Spectrum) in Agawam, Massachusetts. Subcontracted analytical services for phonolites analysis was provided by Phoenix Environmental Labs, Inc and total organic halide analysis was subcontracted to Sterling Analytical Lab.

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness and comparability relative to the project data quality objectives. This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability of the data.

Per the December 2013 QAPP/SAP, a USEPA Tier I data validation was performed on all laboratory data. The QAPP/SAP indicated that a minimum of 10% of the data would undergo USEPA Tier II data validation. Data package SDG SB82197 was selected for Tier II analysis to meet validation requirements. In addition, several samples also underwent Tier II data validation in order to meet project requirements.

The following table summarizes the field samples and quality control samples submitted to the laboratory which underwent Tier I data validation:

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCS	Total Metals	Dissolved Metals	General Chemistry
SDG: SB82039							
TB-20131216	TB	SB82039-01	Aqueous	X	---	---	
MW-62B/20131213	SA	SB82039-02	Aqueous	X	X	---	X
MW-62/20131216	SA	SB82039-03	Aqueous	X	X	---	X
MW-41S/20131216	SA	SB82039-04	Aqueous	X	X	---	X
MW-41D/20131216	SA	SB82039-05	Aqueous	X	X	---	X
MW-41B/20131216	SA	SB82039-06	Aqueous	X	X	---	X
MW-42S/20131216	SA	SB82039-07	Aqueous	X	X	---	X
SDG: SB82287							
MW-30/20131218	SA	SB82287-01	Aqueous	X	X	---	X
TB-20131219	TB	SB82287-02	Aqueous	X	X	---	X
MW-63/20131219	SA	SB82287-03	Aqueous	X	X	---	X
MW-32S/20131219	SA	SB82287-04	Aqueous	X	X	---	X
MW-61S/20131219	SA	SB82287-05	Aqueous	X	X	---	X
MW-32D/20131219	SA	SB82287-06	Aqueous	X	X	---	X
MW-61S/20131219F	SA	SB82287-07	Aqueous	X	X	X	X
MW-32D/20131219	SA	SB82287-08	Aqueous	X	X	---	X
MW-61B/20131219	SA	SB82287-09	Aqueous	X	X	---	X
EB-20131218	EB	SB82287-10	Aqueous	X	X	---	X
SDG: SB82369							
MW-61D/20131219	SA	SB82369-01	Aqueous	X	X	---	X
MW-33/20131219	SA	SB82369-02	Aqueous	X	X	---	X
DUP-20131220	FD	SB82369-03	Aqueous	X	X	---	X
MW-43S/20131220	SA	SB82369-04	Aqueous	X	X	---	X
MW-43D/20131220	SA	SB82369-05	Aqueous	X	X	---	X
MW-31D/20131220	SA	SB82369-06	Aqueous	X	X	---	X
TB-20131220	TB	SB82369-07	Aqueous	X	---	---	---
MW-44S/20131220	SA	SB82369-08	Aqueous	X	X	---	X
MW-44D/20131220	SA	SB82369-09	Aqueous	X	X	---	X
MW-44B/20131220	SA	SB82369-10	Aqueous	X	X	---	X
SDG: SB82439							
TB-20131223	TB	SB82439-01	Aqueous	X	---	---	---
EB-20131223	EB	SB82439-02	Aqueous	X	X	---	X
MW-36/20131223	SA	SB82439-03	Aqueous	X	X	---	X
MW-37D/20131223	SA	SB82439-04	Aqueous	X	X	---	X
MW-37B/20131223	SA	SB82439-05	Aqueous	X	X	---	X
MW-31S/20131223	SA	SB82439-06	Aqueous	X	X	---	X
MW-31B/20131223	SA	SB82439-07	Aqueous	X	X	---	X
DUP-20131223	FD	SB82439-08	Aqueous	X	X	---	X
SDG: SB82669							
TB-20131227	TB	SB82699-01	Aqueous	X	---	---	---
EB-20131227	EB	SB82699-02	Aqueous	X	---	X	---
SW-NR-1/20131227	SA	SB82699-03	Aqueous	X	---	X	---

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCS	Total Metals	Dissolved Metals	General Chemistry
SW-NR-2/20131227	FD	SB82669-04	Aqueous	X	---	X	--
SW-BB-1/20131227	SA	SB82669-05	Aqueous	X	---	X	--
SW-BB-2/20131227	SA	SB82699-06	Aqueous	X	---	X	--

Sample Type: SA = Sample TB = Trip Blank FD = Field Duplicate EB = Equipment Blank

--- = Analysis was not performed for this analytical parameter

VOCs = Volatile Organic Compounds by USEPA Method SW-846 8260B by Gas Chromatography/Mass Spectrometry (GC/MS) Medium Level.

Total and Dissolved Metals = Arsenic, Barium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Sodium, Nickel and Zinc by EPA Method 6010.

General Chemistry = Chloride by EPA Method 300.0, Ammonia as Nitrogen by EPA Method 350.1, Nitrite as Nitrogen by EPA Method 300.0, Nitrate as Nitrogen by EPA Method 300.0, Phenolics by E420.4, Sulfate as SO₄ by EPA Method 300.0, Total Cyanide by EPA Method 335.4, Total Dissolved Solids by SM2540C, Total Organic Carbon by SM5310B, Total Suspended Solids by SM2540D and Total Organic Halogens by SW9020.

Data Package Completeness

Were all items delivered as specified in the QAPP and COC (Chain of Custody)?

Yes, the laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative. The laboratory submitted all required deliverables for SDGs SB82039, SB82287, SB82369, SB82439 and SB82699 with the exception of quality control parameters for the subcontracted analysis of total organic halogens. All quality control recoveries were within established laboratory control limits with the exception of the following:

- **SDG SB82039:**

Temperature upon receipt of sample batch was -0.6°C. Acceptable temperature range is 2 - 6°C. However, given that the temperature was taken using an infrared thermometer, which has an error tolerance of +/- 1.0 degrees Celsius, and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the data.

The Laboratory Control Sample (LCS) recoveries for nitrate as N and nitrite as N were above laboratory control criteria and potentially exhibit a high bias. With a higher level of data validation detected results would be J qualified as estimated values.

Several samples required dilution due to the high concentration of target analytes. This non-conformance does not affect the usability of the data; however data users should be aware of the elevated reporting limits where noted when evaluating data usage for comparison to project standards.

The laboratory reported that the MSD percent recovery for sodium was outside laboratory control criteria, however the of sodium in the parent sample was greater than 4 times the spike concentration and are not considered appropriate for evaluating MS/MSD recoveries, therefore the usability of the data is not affected.

- **SDG SB82287**

Temperature upon receipt of sample batch was 1.8°C. Acceptable temperature range is 2 - 6°C. However, given that the temperature was taken using an infrared thermometer, which has an error tolerance of +/- 1.0 degrees Celsius, and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the data.

Several samples required dilution due to the high concentration of target analytes. This non-conformance does not affect the usability of the data; however data users should be aware of the elevated reporting limits where noted when evaluating data usage for comparison to project standards.

The laboratory reported that the MSD percent recovery for sodium was outside laboratory control criteria, however the of sodium in the parent sample was greater than 4 times the spike concentration and are not considered appropriate for evaluating MS/MSD recoveries, therefore the usability of the data is not affected.

The laboratory indicated that the duplicate analysis of nickel was outside the RPD control limit of 20%. However, the detection of nickel in the sample was less than 5x times the reporting limit, therefore this non-conformance does not affect the usability of the data.

The initial calibration verification (ICV) percent recovery for 2,2-dichloropropane was outside individual acceptance criteria in all samples. The low recovery may indicate a low bias. All associated sample results were non-detect. With a higher level of data validation, these results would be UJ qualified as estimated values.

The LCS recoveries for 1,2-Dibromo-3-chloropropene, bromoform, dibromochloromethane were outside laboratory control limits. These reported low result may indicated potentially low bias. All associated sample recoveries were non-detect. With a higher level of data validation, these results would be UJ qualified as estimated values.

The LCS recoveries for 2,2-Dichloropropane, ethyl tert-butyl ether and tert-butanol, were outside laboratory control limits. These reported high recoveries may indicated potentially high bias. All associated sample results were non-detect. With a higher level of data validation, qualification of data would not be required.

Several MS/MSD spike recoveries for VOCs were outside of laboratory control limits. The batch was acceptable based on LCS recoveries.

Several VOC analyte percent differences for continuing calibration verification (CCV) were outside individual acceptance criteria of 20%; however the percent recoveries were within overall method allowances. With a higher level of data validation, qualification of data would not be required.

- **SDG SB82369**

Temperature upon receipt of sample batch was 0.8°C. Acceptable temperature range is 2 - 6°C. However, given that the temperature was taken using an infrared thermometer, which has an error tolerance of +/- 1.0 degrees Celsius, and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the

data.

The laboratory reported that the pH for one cyanide sample needed to be laboratory adjusted to be in accordance with preservation requirements of the applicable method. This non-conformance indicates a potential low bias. With a higher level of data validation, this non-detect result would be UJ qualified as an estimated value.

The Laboratory Control Sample (LCS) recoveries for nitrate as N and nitrite as N were above laboratory control criteria and potentially exhibit a high bias. With a higher level of data validation detected results would be J qualified as estimated values.

Several samples required dilution due to the high concentration of target analytes. This non-conformance does not affect the usability of the data; however data users should be aware of the elevated reporting limits where noted when evaluating data usage for comparison to project standards.

The laboratory reported that the MSD percent recovery for sodium was outside laboratory control criteria, however the of sodium in the parent sample was greater than 4 times the spike concentration and are not considered appropriate for evaluating MS/MSD recoveries, therefore the usability of the data is not affected.

The LCS recoveries for 2,2-dichloropropane, acetone and ethanol were outside laboratory control limits. These reported high recoveries may indicate potentially high bias. All associated sample results were non-detect. With a higher level of data validation, qualification of data would not be required

Several VOC analyte percent differences for continuing calibration verification (CCV) were outside individual acceptance criteria of 20%; however the percent recoveries were within overall method allowances. With a higher level of data validation, qualification of data would not be required.

- **SDG SB82439**

Total Dissolved Solids in equipment blank EB-20131223 had a detected result of 7 mg/L. All associated sample results were greater than 5x the blank result and upon higher level of data validation, qualification of data would not be required.

Several samples required dilution due to the high concentration of target analytes. This non-conformance does not affect the usability of the data; however data users should be aware of the elevated reporting limits where noted when evaluating data usage for comparison to project standards.

The laboratory indicated that the duplicate analysis of copper was outside the RPD control limit of 20%. However, the detection of nickel in the sample was less than 5x times the reporting limit, therefore this non-conformance does not affect the usability of the data.

The initial calibration verification (ICV) percent recovery for 2,2-dichloropane was outside individual acceptance criteria in all samples. The low recovery may indicate a low bias. All associated sample results were non-detect. With a higher level of data validation, these results would be UJ qualified as estimated values.

The LCS recoveries for acetone, 1,1,1-trichlorethane, 1,1,2-trichlorotrifluoroethane, 1,2-dibromo-3-chloropropane, 2,2-dichloropropane and bromoform were outside laboratory control limits. The reported high recoveries may indicate potentially high bias. All associated sample results were non-detect. With a higher level of data validation, qualification of data would not be required.

The LCS recovery for carbon tetrachloride was outside laboratory control limits. The reported low recoveries may indicate a potentially low bias. All associated sample results were non-detect. With a higher level of data validation, these results would be UJ qualified as estimated values.

Several VOC analyte percent differences for continuing calibration verification (CCV) were outside individual acceptance criteria of 20%, however the percent recoveries were within overall method allowances. With a higher level of data validation, qualification of data would not be required.

- **SDG SB82699**

Temperature upon receipt of sample batch was -0.2°C. Acceptable temperature range is 2 - 6°C. However, given that the temperature was taken using an infrared thermometer, which has an error tolerance of +/- 1.0 degrees Celsius, and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the data.

Manganese in equipment blank EB-20131227 had a detected result of 0.0088 mg/L. All associated sample results were less than 5x the blank result. If a higher level of data validation was required, these results would be U qualified as non-detect.

Several samples required dilution due to the high concentration of target analytes. This non-conformance does not affect the usability of the data; however data users should be aware of the elevated reporting limits where noted when evaluating data usage for comparison to project standards.

The initial calibration verification (ICV) percent recovery for 2,2-dichloropropane and ethanol were outside individual acceptance criteria in several samples. The low recovery may indicate a low bias. All associated sample results were non-detect. With a higher level of data validation, these results would be UJ qualified as estimated values.

The LCS recoveries for acetone, 1,1,1-trichlorethane, 1,1,2-trichlorotrifluoroethane, 1,2-dibromo-3-chloropropane, 2,2-dichloropropane bromoform, ethyl tert-butyl ether, methyl tert-butyl ether, tert-butanol and carbon tetrachloride were outside laboratory control limits. The reported high recoveries may indicate potentially high bias. All associated sample results were non-detect. With a higher level of data validation, qualification of data would not be required.

Several VOC analyte percent differences for continuing calibration verification (CCV) were outside individual acceptance criteria of 20%; however the percent recoveries were within overall method allowances. With a higher level of data validation, qualification of data would not be required.

Data Usability

It is the opinion of this reviewer that all data is valid and is considered usable for project

purposes.

The following table summarizes the field samples and quality control samples submitted to the laboratory which underwent Tier II data validation:

Field ID	Sample Type	Lab ID	Matrix	Analyses		
				VOCs	Total Metals	General Chemistry
SDG: SB82197						
TB-20131218	TB	SB82197-01	Aqueous	X	---	---
MW-50S/20131218	SA	SB82197-02	Aqueous	X	X	X
MW-53D/20131218	SA	SB82197-03	Aqueous	X	X	X
MW-51B/20131218	SA	SB82197-04	Aqueous	X	X	X
MW-42B/20131218	SA	SB82197-05	Aqueous	X	X	X
Selected Samples						
MW-31S/20131223	SA	SB82439-06	Aqueous	X	X	---
MW-31B/20131223	SA	SB82439-07	Aqueous	X	X	---
MW-43S/20131220	SA	SB82369-04	Aqueous	X	X	---
MW-43D/20131220	SA	SB82369-05	Aqueous	X	X	---
MW-44S/20131220	SA	SB82369-08	Aqueous	X	X	---
MW-44D/20131220	SA	SB82369-09	Aqueous	X	X	---
MW-44B/20131220	SA	SB82369-10	Aqueous	X	X	---

General Overall Assessment:

- Data are usable without qualification.
 Data are usable with qualification (noted below).
 Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any case narrative comments concerning data qualification were noted below.

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC (Chain of Custody)?

Yes, the laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative. The laboratory submitted all required deliverables with the exception of quality control parameters for the subcontracted analysis of total organic halogens.

2.0 Laboratory Case Narrative, Sample Preservation and Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated the following:

- **General Chemistry** - Several samples required dilution prior to sample analysis due to high concentration of target analytes. See Section 10.0 for further discussion and resultant data qualification.
- **Total Metals** - The MS/MSD or RPD recoveries for several analytes were outside laboratory control limits. See Section 7.0 for further discussion and resultant qualification. Several samples required dilution prior to sample analysis due to high concentration of target analytes. See Section 10.0 for further discussion and resultant data qualification.
- **VOCs** – LCS or RPD recoveries for several analytes were outside of quality control limits. See Section 5.0 for further discussion and resultant qualification. MS/MSD recoveries for several analytes were outside laboratory control limits. See Section 7.0 for further discussion and resultant qualification. The CCV analyte percent difference was outside of individual acceptance limits for several analytes. See Section 11.0 for further discussion and resultant data qualification.

Samples were received at the Spectrum Analytical, Inc. laboratory in good condition. Temperature upon receipt of sample batch was - 0.7°C. Acceptable temperature range is 2 - 6°C. However, given that the temperature was taken using an Infrared thermometer, which has an error tolerance of +/- 1.0 degrees Celsius, and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the data.

3.0 Technical Holding Times

Were samples extracted/analyzed within method specific holding time requirements?

Yes. All samples were prepared and/or analyzed within method specific required holding times.

4.0 Blank Contamination

Were any analytes detected in the Method Blanks or Trip Blanks?

No analytes were detected in the associated instrument and method blanks.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No. The laboratory control sample (LCS) provides information on the accuracy of the analytical method and on the laboratory performance. The following table summarizes the LCS results that were outside the acceptance limits.

LCS ID	Parameter	Analyte	LCS/LCSD (%)	RPD (%)	LCS/LCSD/RPD Criteria (Recovery %)
1330666-BS1	8260B	Bromoform	157/158	1	70-130/20
		Dibromochloromethane	136/131	4	70-130/20
1330918-BS1	8260B	1,4-Dioxane	80/121	41	70-130/20

ID = Identification LCS/D = Laboratory Control Sample/Duplicate RPD = Relative Percent Difference

% = Percent

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. The RPD result for 1,4-Dioxane in batch 1330918-BS1 may potentially indicate poor precision. However, as the associated data results were non-detect, qualification of data was not required.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes. Surrogates are added to all samples prior to purging to evaluate the laboratory performance on individual samples. Four volatile surrogates (dibromofluoromethane, 1,2-dichloroethane-d4, toluene-d8, and bromofluorobenzene) were added to each sample. Percent recoveries (%R) for all volatile surrogates in all samples were within laboratory evaluation criteria. Qualification of data was not required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples reported as part of this SDG?

Yes. A matrix spike was performed from a site specific sample for VOCs, metals and phenolics.

Were MS/MSD recoveries within evaluation criteria?

No. MS/MSD recoveries which were outside acceptance evaluation criteria are summarized in the table below.

Sample ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD (%)	MS/MSD/ RPD Criteria (%)
MW-50S/20131218	8260B	Bromoform	169/162	4	70-130/20
		1,2-Dibromo-3-chloropropane	134/140	5	70-130/20
		Dibromochloromethane	138/134	3	70-130/20
	6010	Sodium	154/193	2	75-125/20
		Manganese	92/71	3	75-125/20
MW-43S/20131220	6010	Sodium	146/138	3	75-125/20

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference % = Percent

Data qualification of sample results due to MS/MSD recovery is summarized in the table below. Analytical results reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Field ID	Parameter	Analyte	Qualification
MW-50S/20131218	6010	Sodium	J
MW-50S/20131218	6010	Manganese	J
MW-43S/20131220	6010	Sodium	J

8.0 Post Spike (Metals only)

Were post spike recoveries within evaluation criteria?

No. Post spike recoveries were outside of laboratory criteria. Sample results were previously qualified due to MS/MSD recoveries. No further action required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples performed as part of this SDG?

Yes, as spiked duplicates, which are discussed in the previous section. In addition, laboratory duplicate results were evaluated for Total Dissolved Solids and Phenolics. All RPD results were within laboratory criteria.

10.0 Field Duplicate Results

Were field duplicate samples collected as part of the evaluated SDGs?

No. A field duplicate sample was not collected and evaluated as part of this SDG. However, field duplicates were collected at the QAPP/SAP required frequency of 1:20 samples.

11.0 Detects and Calibration Range

For samples that were diluted and nondetect, were undiluted results also reported?

Yes, with the exceptions noted below.

The following table identifies the analyses which were reported as nondetect, diluted, and an undiluted run **was not** reported:

Field ID	Parameter	Dilution Factor
MW-50S/20131218	6010	5
	300.0	10
MW-53D/20131218	6010	5
	300.0	26
MW-51B/20131218	300.0	13
MW-51D/20131218	300.0	11
MW-42B/20131218	300.0	5
MW-31S/20131223	8260	500
MW-31S/20131223	8260	1000
	350.1	5
	300.0	5
	E420.4	5
MW-31B/20131223	300.0	24

For samples that were diluted, were the detected results divided by the dilution factors greater than the reporting limits and within calibration range?

Yes. However, data users should be aware of the elevated reporting limits when evaluating data usage for comparison to project standards.

For samples that were not diluted and detected, were the results within calibration range?

Yes, in cases where sample results exceeded the calibration range, a dilution was performed for the sample.

12.0 Additional Qualifications/Quality Control Outliers

Were additional qualifications applied?

- Several VOC analyte percent differences for continuing calibration verification (CCV) 1 were outside individual acceptance criteria of 20%, however the percent recoveries were within overall method allowances. Therefore qualification of data was not required.
- Several reporting limits were raised to correlate to batch quality control reporting limits. Data users should be aware of these elevated reporting limits when evaluating data usage for comparison to project standards.

13.0 Overall Data Assessment

The data are usable for its intended purpose based on an evaluation of the QC parameters discussed in this report. Some data are qualified as estimated due to the inability to meet all QC criteria. The table below summarizes the final qualifications for the analytical data.

Data Qualifier Summary:

Field ID	Analysis	Analyte	Qualifier	Reason Code
MW-50S/20131218	6010	Sodium	J	1
MW-50S/20131218	6010	Manganese	J	1
MW-43S/20131220	6010	Sodium	J	1

Data Validation Qualifier Codes:

U = Non-detect. The compound was analyzed for, but not detected.

J = Estimated. The associated numerical value is an estimated quantity. The analyte was detected but the reported value may not be accurate or precise.

UJ = Estimated Non-detect. The analyte was not detected above the method detection limit. However, it is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate or other spike recovery.

R = Rejected. The sample results are unusable due to the quality of the data generated.

Data Qualifier Reason Codes:

1 Matrix Spike/Matrix Spike Duplicate or RPDs were outside of quality control parameters.